



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Great Plains Regional Office  
115 Fourth Avenue S.E.  
Aberdeen, South Dakota 57401



IN REPLY REFER TO:  
DESCRM  
MC-208

NOV 23 2009

## MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Regional Director, Great Plains Region 

SUBJECT: Environmental Assessment and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed Access Road Upgrade, Township 150 North, Range 94 West, Sections 29 and 32 by EOG Resources, Inc. on the Fort Berthold Reservation, an Environmental Assessment (EA) has been completed and a Finding of No Significant Impact (FONSI) has been issued.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (1506.6(b)). Please post the attached notice of availability at the agency and tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Marcus Levings, Chairman, Three Affiliated Tribes (with attachment)  
Perry "No Tears" Brady, THPO (with attachment)  
Roy Swalling, BLM, Dickenson, ND (with attachment)

## **Finding of No Significant Impact**

**EOG Resources, Inc.**

### **Proposed Access Road Upgrade Township 150 North, Range 94 West, Sections 29 and 32**

**Fort Berthold Indian Reservation  
McKenzie County, North Dakota**

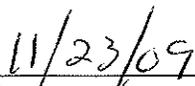
The U.S. Bureau of Indian Affairs (BIA) has received a proposal to upgrade an existing two-track road on the Fort Berthold Indian Reservation located in the SE ¼ of Section 29, Township (T) 150 North (N), Range (R) 94 West (W) and Section 32, T150N, R94W, McKenzie County, North Dakota. Associated federal actions by BIA include determinations of effect regarding cultural resources, approvals of leases, rights-of-way and easements, and a positive recommendation to the Bureau of Land Management regarding the Applications for Permit to Drill.

Potential of the proposed actions to impact the human environment is analyzed in the attached Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed EA, I have determined that the proposed projects will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement was solicited and environmental issues related to the proposal were identified.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species.
4. The proposed actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed projects will improve the socio-economic condition of the affected Indian community.

  
Regional Director

  
Date

# **ENVIRONMENTAL ASSESSMENT**

**United States Department of the Interior  
Bureau of Indian Affairs**

**Great Plains Regional Office  
Aberdeen, South Dakota**

**Cooperating Agency:**

**Bureau of Land Management**

**North Dakota State Office  
Dickinson, North Dakota**



**EOG Resources, Inc.**

**Proposed Access Road Upgrade  
Township 150 North, Range 94 West, Sections 29 and 32**

**Fort Berthold Indian Reservation**

**November 2009**

For information contact:  
Bureau of Indian Affairs, Great Plains Regional Office  
Division of Environment, Safety and Cultural Resources Management  
115 4th Avenue SE, Aberdeen, South Dakota 57401 (605) 226-7656

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION.....	1
2.0 PROPOSED ACTION AND ALTERNATIVES.....	4
2.1 No Action Alternative .....	4
2.2 Proposed Action Alternative .....	4
3.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS .....	6
3.1 No Action Alternative .....	7
3.2 Air Quality.....	7
3.3 Public Health and Safety .....	9
3.4 Water Resources.....	10
3.4.1 Surface Water.....	10
3.5 Wetlands, Habitat, and Wildlife.....	12
3.5.1 Wetlands.....	12
3.5.2 Wildlife .....	12
3.6 Soils.....	15
3.6.1 Natural Resources Conservation Service Soil Data.....	15
3.7 Vegetation and Invasive Species.....	19
3.8 Cultural Resources .....	21
3.9 Socioeconomics.....	22
3.9.1 Population .....	22
3.9.2 Employment.....	23
3.9.3 Income.....	23
3.9.4 Housing .....	24
3.10 Environmental Justice .....	24
3.11 Mitigation and Monitoring .....	25
3.12 Irreversible and Irrecoverable Commitment of Resources .....	26
3.13 Short-Term Use of the Environment versus Long-Term Productivity.....	26
3.14 Cumulative Impacts.....	26
4.0 CONSULTATION AND COORDINATION .....	28
5.0 REFERENCES.....	33
6.0 ACRONYMS .....	35

**LIST OF FIGURES**

<b><u>Figure</u></b>	<b><u>Page</u></b>
1. Project Location Map.....	2
2. Detailed Access Road Map.....	3
3. Existing Two-track Road, Looking North.....	5
4. Existing Two-track Road, Looking South.....	6
5. Project Area Watersheds and Wetlands.....	11
6. Approximate Spatial Extent of Soil Types within the Project Area.....	16

**LIST OF TABLES**

<b><u>Table</u></b>	<b><u>Page</u></b>
1. Comparison to National Ambient Air Quality Standards for Dunn and McKenzie Counties, North Dakota.....	8
2. Soil Mapping Units and Attributes.....	15
3. North Dakota Noxious Weed List (from NDDA 2007).....	20
4. Project Area Land Cover Type.....	20
5. Historic and Current Populations for the Project Area and North Dakota.....	22
6. Income and Employment for the Project Area and State.....	23
7. Housing Units.....	24
8. Scoping Comments.....	29

## **1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION**

EOG Resources, Inc. (EOG) is proposing to upgrade an existing two-track road on the Fort Berthold Indian Reservation (Reservation) that would provide access to EOG's mineral leases in the area, including a proposed well located in the Mandaree Township on private lands with private minerals rights. Development has been proposed on lands held in trust by the United States in McKenzie County, North Dakota. The U.S. Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The BIA manages lands held in title by the tribe and tribal members.

The purpose of the federal action is to respond to a request from EOG to grant a right-of-way (ROW) permit to access and upgrade the existing road across allotted lands on the Reservation in McKenzie County, North Dakota. The need for the action is to use the road to access a well lease location in order to extract oil and gas resources from EOG's mineral leases in the area. Potential of the proposed action to impact the human environment is analyzed in this Environmental Assessment (EA), as required by the National Environmental Policy Act of 1969 (NEPA). This EA will analyze whether granting the ROW would result in significant effects to the human environment, including natural, cultural, and socioeconomic resources. As illustrated in Figure 1, development of the road is proposed in the SE ¼ of Section 29, Township (T) 150 North (N), Range (R) 94 West (W) and Section 32, T150N, R94W.

The BIA's general mission is to represent the interests, including the Trust Resources, belonging to members of the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara (MHA) Nation as well as individual tribal members. The BIA's role in the proposed project includes analyzing the proposed ROW, and determining the impacts on the human environment, including cultural resources and other critical elements.

This proposed federal action requires compliance with NEPA (42 United States Code [USC] 4321, et seq.) and regulations of the Council on Environmental Quality (CEQ) (Title 40 Code of Federal Regulations [CFR] 1500–1508). Analysis of the proposal's potential to impact the human environment is expected to both improve and explain federal decision-making. The ROW application was submitted by EOG to describe the development procedures and technical practices. The procedures and practices explained will help to describe the impacts to the land. The plat submitted to the BIA by EOG for approval is included in this document as Figure 2; it describes the exact location and distances required to construct the road and contributes to the technical basis of this EA. Based on this analysis, this EA will result in either a Finding of No Significant Impact or a decision to prepare an Environmental Impact Statement (EIS).

Any authorized project will comply with all applicable federal, state, and tribal laws, rules, policies, regulations, and agreements. No construction or other ground-disturbing operations will begin until all necessary leases, easements, surveys, clearances, consultations, permissions, determinations, and permits are in place.

Environmental Assessment: Proposed Access Road Upgrade  
 Township 150 North, Range 94 West, Sections 29 and 32

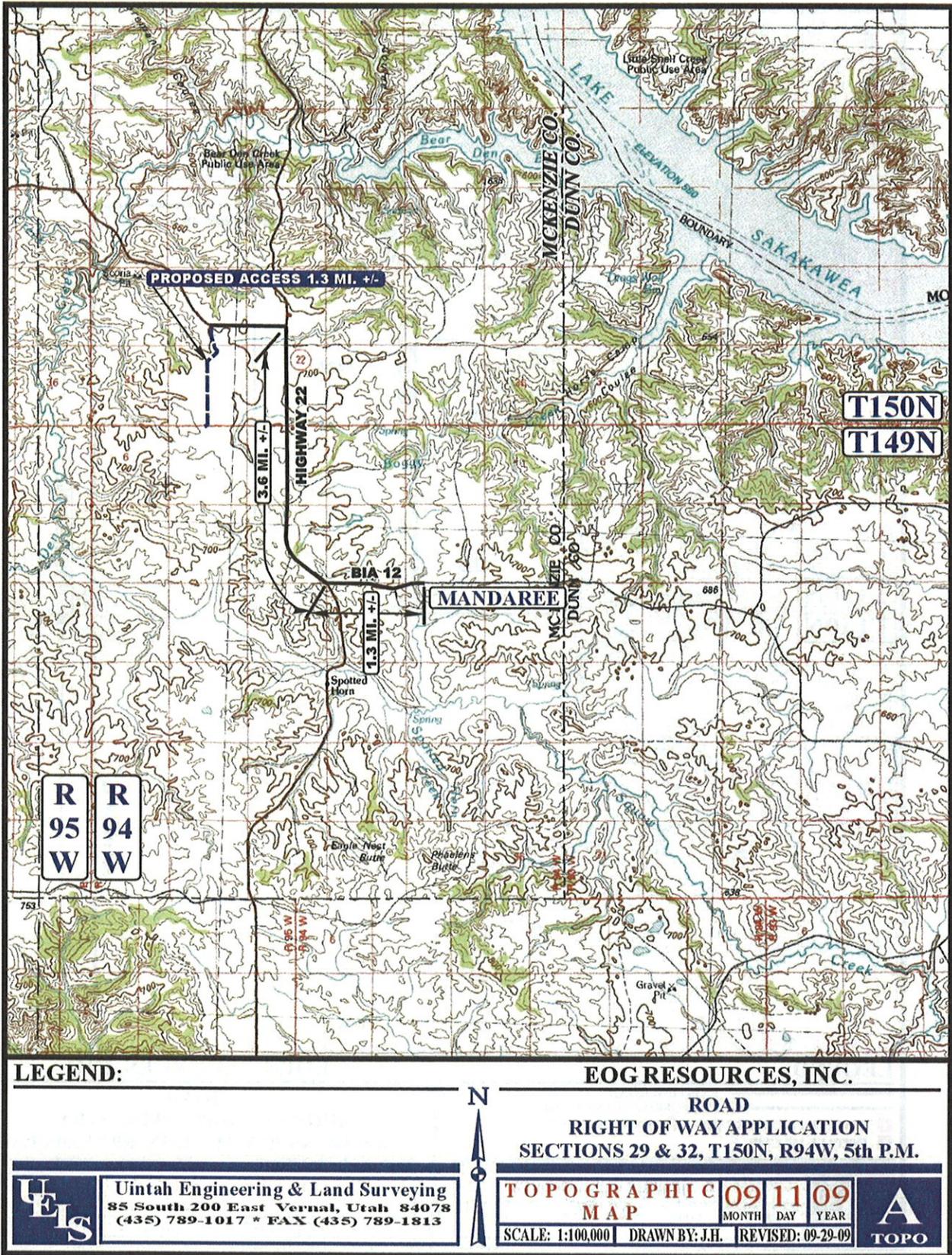


Figure 1. Project Location Map.

Environmental Assessment: Proposed Access Road Upgrade  
 Township 150 North, Range 94 West, Sections 29 and 32

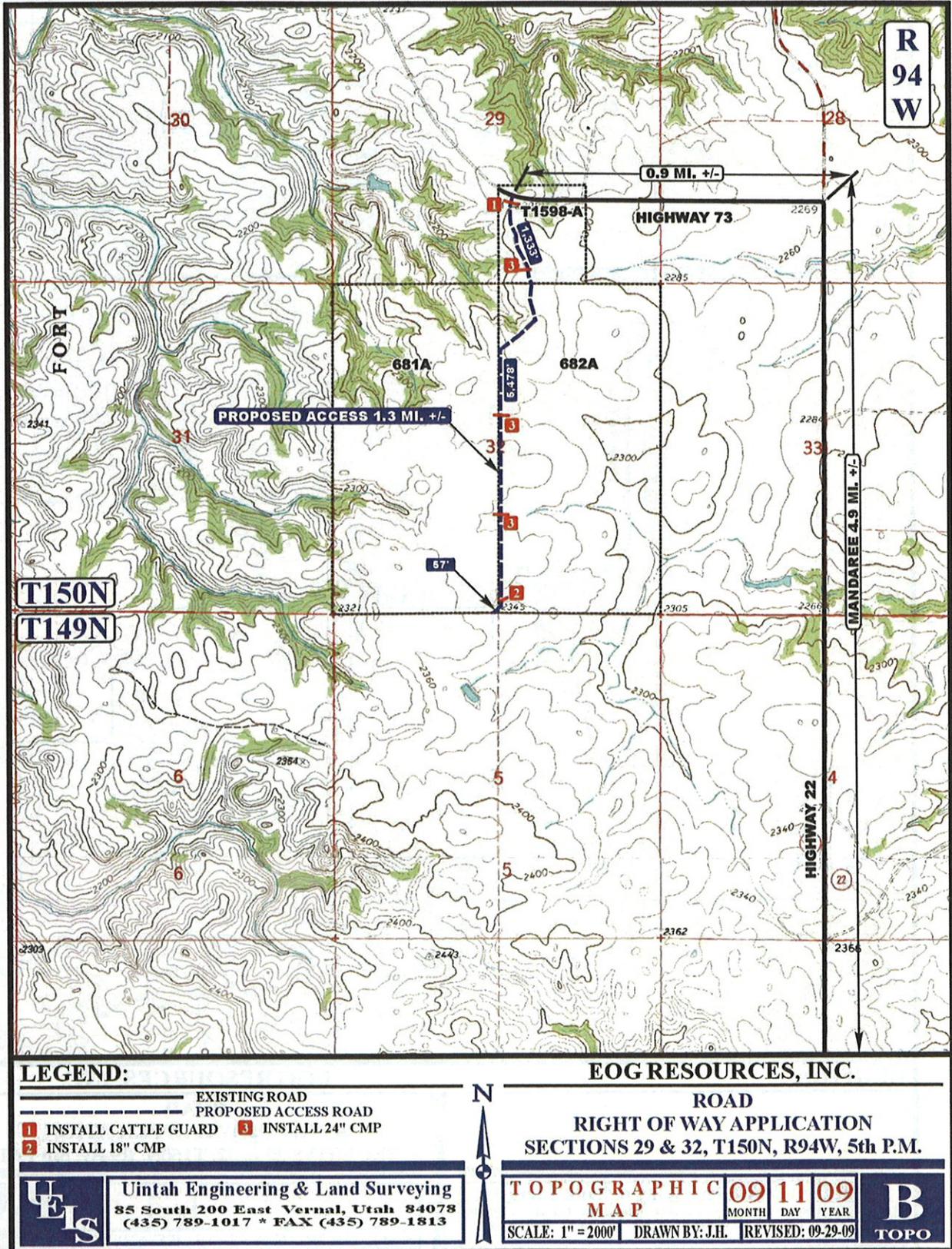


Figure 2. Detailed Access Road Map.

## **2.0 PROPOSED ACTION AND ALTERNATIVES**

### **2.1 NO ACTION ALTERNATIVE**

The No Action Alternative will be the only consideration to the Proposed Action and must be considered within an EA. However, if this alternative is selected, BIA would not approve the ROW permit. Current land use practices would continue at the site. Development under other proposal would remain a possibility, but No Action is the only available or reasonable alternative to the specific proposal considered in this document.

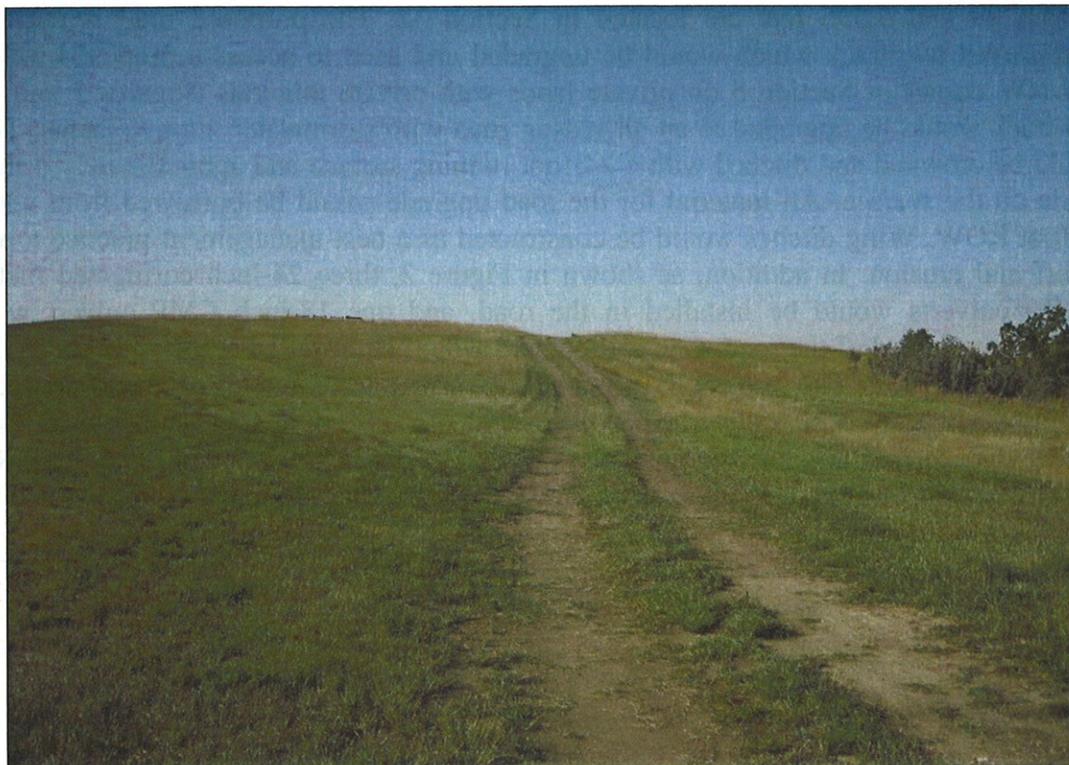
### **2.2 PROPOSED ACTION ALTERNATIVE**

This document analyzes the impacts of a specific project—construction/upgrading of one access road on public lands within the Reservation. The proposed road is located in Sections 29 and 32, T150N, R94W in McKenzie County, North Dakota (Figure 1). The proposed road can be accessed from the town of Mandaree by traveling west on BIA 12 for approximately 1.3 miles, turning north on Highway 22 for approximately 3.6 miles, and turning west on Highway 73 for approximately 0.9 mile. The proposed road is located in the western portion of the Reservation in McKenzie County, North Dakota, about 56 miles north of Dickinson. The proposed road would provide access to mineral leases in the area, including a proposed well in the Mandaree Township on private land with private minerals rights.

EOG proposes to upgrade up to 6,868 feet (1.3 miles) of an existing two-track access road with a 66-foot-wide ROW. Of the total length of road, approximately 1,333 feet are located in Section 29 and 5,535 feet are located in Section 32. The proposed road is currently an unimproved two-track which would be upgraded and used to access a proposed well in the NW/NW corner of Section 5 on private lands with private minerals (Figures 3 and 4). The two-track would be upgraded to an all-season road with stormwater improvements. The road would be crowned and ditched with a 24-foot running surface and approximately 4 inches of scoria on the surface. All material for the road upgrade would be borrowed from within the 66-foot ROW. Wing ditches would be constructed as a best management practice to manage runoff and erosion. In addition, as shown in Figure 2, three 24-inch corrugated metal pipe (CMP) culverts would be installed in the road, and one 18-inch CMP culvert would be installed at the end of the road. One cattle guard would be installed at the entrance to the road from Highway 73. The project is proposed to take approximately three to four days to complete with a maximum disturbed ROW of 66 feet resulting in approximately 10.5 acres of surface disturbance. A gathering pipeline may also be constructed within the 66-foot ROW at a later date, but would not result in surface disturbance additional to the 10.5 acres.



**Figure 3. Existing Two-track Road, Looking North.**



**Figure 4. Existing Two-track Road, Looking South.**

### **3.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS**

The Fort Berthold Indian Reservation is the home of the Three Affiliated Tribes of the MHA Nation. Located in west-central North Dakota, the Reservation encompasses more than one million acres, of which almost half are held in trust by the United States for either the MHA Nation or individual allottees. The remainder of the land is owned in fee simple title, sometimes by the MHA Nation or tribal members, but usually by non-Indians. In 1945, the Garrison Dam was completed, inundating much of the Reservation. In 1956, the rest of the land was divided into three sections by Lake Sakakawea, an impoundment of the Missouri River upstream of the Garrison Dam near Riverdale, North Dakota. The Reservation occupies portions of six counties, including Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward. However, this analysis primarily focuses on two of these counties, Dunn and McKenzie, which overlap the western portion of the Reservation, closest to the Project Area.

The Reservation is within the northern Great Plains ecoregion and consists of four physiographic units: 1) the Missouri Coteau Slope north of Lake Sakakawea; 2) the Missouri River trench (now flooded); 3) the Little Missouri River badlands; and 4) the Missouri Plateau south and west of Lake Sakakawea (Williams and Bluemle 1978). The Missouri Coteau Slope encompasses much of the Reservation, including the Project Area; it is a glaciated landscape of gently rolling topography. Elevations of the glaciated, gently rolling landscape range from a normal pool elevation of 1,838 feet at Lake Sakakawea to over 2,600 feet on Phaelan's Butte near Mandaree. Annual precipitation on the plateau averages between 15 and 17 inches. Mean temperatures fluctuate between -3 and 21 degrees Fahrenheit (° F) in January and between 55 and 83°F in July, with 95 to 130 frost-free days each year (Bryce et al. 1998; High Plains Regional Climate Center 2008).

The proposed access road is in a rural area consisting of mostly grassland, shrubland, and cropland that is currently farmed, idle, or used to graze livestock. The landscape has been previously disturbed by dirt trails and gravel and paved roadways. Three residences/structures are within 1 mile of the proposed access road, with one structure located directly adjacent to the road. The broad definition of the human environment under NEPA leads to the consideration of the following elements: air quality, public health and safety, water resources, wetland/riparian habitat, threatened and endangered species, soils, vegetation and invasive species, cultural resources, socioeconomic conditions, and environmental justice. Existing conditions and potential impacts to these elements are analyzed for both the No Action Alternative and the Proposed Action. Impacts may be beneficial or detrimental, direct or indirect, and short-term or long-term. This EA also analyzes the potential for cumulative impacts and ultimately makes a determination as to the significance of any impacts. In the absence of significant negative consequences, it should be noted a significant benefit from the project does not in itself require preparation of an EIS. After consideration of the No Action Alternative below, existing conditions and potential impacts from implementation of the proposed road are described.

#### **3.1 NO ACTION ALTERNATIVE**

Under the No Action Alternative, the proposed road would not be constructed. Existing conditions would not be impacted for the following critical elements: air quality, public health

and safety, water resources, wetland and riparian habitat, threatened and endangered species, soils, vegetation and invasive species, cultural resources, socioeconomic conditions, and environmental justice. As such, there would be no project-related surface disturbance and traffic would not change from present levels.

### **3.2 AIR QUALITY**

The federal government established the National Ambient Air Quality Standards (NAAQS) under the federal Clean Air Act (CAA) and its amendments for six criteria pollutants: carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead, and particulate matter. The federal government also authorizes local, state, and tribal air quality regulatory agencies to establish regulations that are more stringent than federal requirements. The State of North Dakota has adopted the NAAQS.

The CAA and its amendments also established the mandatory federal Prevention of Significant Deterioration (PSD) Class I and Class II designation. Mandatory federal Class I areas include existing wilderness areas larger than 5,000 acres and national parks larger than 6,000 acres. All other locations in the country where ambient air quality is within the NAAQS (including attainment and unclassified areas) are designated as PSD Class II areas. Both classes are protected under the PSD regulations, which limit the incremental amount by which pollution levels are allowed to increase above historical levels. Class I areas are identified for somewhat more stringent protection from air pollution damage than Class II areas, except in specified cases.

To ensure that the ambient air quality in North Dakota is maintained in accordance with the NAAQS, the North Dakota Department of Health (NDDH) operates a network of 13 ambient air quality monitoring (AAQM) stations throughout the state that record emissions and provide hourly observations of wind speed and wind direction. Stations closest to the Project Area include Watford City in McKenzie County (25 miles east and north of the project site), Dunn Center in Dunn County (31 miles south and east), and Beulah in Mercer County (57 miles southeast). Criteria pollutants tracked under the NAAQS of the CAA include SO<sub>2</sub>, particulate matter (PM<sub>10</sub> only), NO<sub>2</sub>, and O<sub>3</sub>. The other two criteria pollutants, lead (Pb) and CO, are not monitored by any of the AAQM stations (NDDH 2007). It should be noted that the U.S. Environmental Protection Agency (EPA) published a notice in the Federal Register (FR) on March 27, 2008, that stated the NAAQS for ozone has been lowered to 0.075 parts per million (ppm) (40 CFR Parts 50 and 58). The EPA will issue a separate rule to address monitoring requirements necessary to implement the new standards. The EPA intends to issue a final rule in 2009; the EPA will issue designations of attainment, nonattainment, and unclassifiable areas no later than March 2010. Table 1 summarizes federal standards and the existing air quality data from the three-county study area.

**Table 1. Comparison to National Ambient Air Quality Standards for Dunn and McKenzie Counties, North Dakota.**

Pollutant	Averaging Period	NAAQS ( $\mu\text{g}/\text{m}^3$ )	NAAQS (ppm)	County	
				Dunn	McKenzie
SO <sub>2</sub>	24-hour	365	0.14	0.004 pm	0.004 ppm
	Annual Mean	80	0.03	0.001 ppm	0.001 ppm
PM <sub>10</sub>	24-hour	150	--	50 ( $\mu\text{g}/\text{m}^3$ )	35 ( $\mu\text{g}/\text{m}^3$ )
	Annual Mean	50	--	--	--
PM <sub>2.5</sub>	24-hour	35	--	--	--
	Weighted Annual Mean	15	--	--	--
NO <sub>2</sub>	Annual Mean	100	0.053	0.002 ppm	0.01 ppm
CO	1-hour	40,000	35	--	--
	8-hour	10,000	9	--	--
Pb	3-month	1.5	--	--	--
O <sub>3</sub>	1-hour	240	0.12	0.071 ppm	0.072 ppm
	8-hour	--	0.75	0.061 ppm	0.066 ppm

Source: EPA 2007.

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter; ppm = parts per million

The air pollutant data shown in Table 1 indicate that Dunn and McKenzie counties are below established NAAQS and are therefore designated as attainment areas for all criteria pollutants. North Dakota was one of only nine states in 2006 that met standards for all criteria pollutants. McKenzie County, in particular, ranks as one of the counties with the cleanest air quality in the United States (American Lung Association 2006). All of the counties contained within the Reservation can be expected to have similar air quality conditions to McKenzie County. The CAA mandates prevention of significant deterioration in designated attainment areas. Class I areas are of special national significance and include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres and designated prior to 1977. Both visibility impairment and increases in pollutant concentrations are capped. There is a PSD Class I airshed at nearby Theodore Roosevelt National Park, which covers about 110 square miles of land in three units within the Little Missouri National Grassland between Medora and Watford City. The Reservation can be considered a PSD Class II attainment airshed, which affords it a lower level of protection from significant deterioration.

Implementation of the Proposed Action would not degrade the air quality in the area because the project would not generate a detectable amount of pollutants. Any pollutants released due to surface disturbance would be temporary and intermittent and would likely remain airborne only for a short period of time. A BIA-approved fugitive dust suppressant would be applied to the road during road construction to limit pollutants to the immediate Project Area. Also, limiting vehicle speeds traveling to and from the Project Area on natural surface roads would minimize visible dust plumes during dry periods. Furthermore, proper maintenance of emission controls on vehicles and construction equipment would be performed to ensure effective pollutant emission reductions. No detectable or long-term impacts to air quality or visibility are expected within the airsheds of the Reservation, state, or Theodore Roosevelt

National Park. No laws, regulations, or other requirements have been waived; no monitoring or compensatory measures are required.

### **3.3 PUBLIC HEALTH AND SAFETY**

Federal and state laws and policies regulate the generation, use, storage, and disposal of hazardous and extremely hazardous substances. Substances considered hazardous are listed in 40 CFR 302, Designation, Reportable Quantities, and Notification and are administered under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) of the Comprehensive Environmental Response, Compensation, and Liability Act. Hazardous substances may also be listed within Section 112 (r) of the CAA (1990). Extremely hazardous materials are those identified in the EPA's List of Extremely Hazardous Substances (40 CFR 355) titled as the Emergency Planning and Notification, which establishes a list of extremely hazardous substances and states the threshold planning quantities and the facilities notification responsibilities necessary for the development and implementation of state and local emergency response plans required under the Emergency Planning and Community Right-to-Know Act.

Satellite imagery revealed the presence of residences/structures in the area, one of which is located adjacent to the proposed access road.

EOG has consulted with the Bureau of Reclamation and there are no rural water pipelines for the Fort Berthold Rural Water System within the proposed ROW. Existing water pipelines along adjacent roads would not be impacted.

Negative impacts from construction of the proposed access road would be largely temporary. Noise, fugitive dust, and increased traffic in the area, which increases the traffic hazard, would be present for the duration of construction, which would last approximately three to four days. Dust suppression techniques would be employed to reduce fugitive dust emissions and noise levels would be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. During construction and operation, a variety of by-products and waste materials would be generated including construction waste, garbage, and miscellaneous solid and sanitary wastes. With the proper procedures in place, it is anticipated that waste would not present any environmental consequences especially if materials are collected in appropriate containers and recycled or disposed off-site in accordance with applicable regulations.

During construction of the proposed access road, accidental spills or leaks associated with equipment failures, refueling and maintenance of equipment, and storage of fuels, oil, or other fluids could cause soil and surface water and/or groundwater contamination. The severity of potential impacts from accidental material spills would depend upon the chemical released, the quantity released, and the proximity of the release to a waterbody or aquifer.

The construction site shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse,

oil drums, petroleum products, ashes, and equipment. EOG shall be responsible for assuring that all waste is properly disposed of at the appropriate regulated disposal facility.

No hazardous materials shall be used during any phase of the operations unless prior approval has been obtained from the BIA.

If any hazardous chemicals, fuels, oils, lubricants, and/or noxious fluids are spilled during drilling operations, they shall be cleaned up immediately. EOG shall have absorbent on site for spill containment. After clean up, the chemicals, fuels, oil, lubricants, and/or noxious fluids and any contaminated material shall be removed from the site and disposed of at an approved disposal facility.

The EPA specifies chemical reporting requirements under Title III of the SARA, as amended. No materials used or potentially generated by this project are on the SARA list or on EPA's list of extremely hazardous substances in 40 CFR 355. Project design and operational precautions mitigate against impacts from toxic gases, hazardous materials, and traffic. Impacts from the Proposed Action are considered minimal, unlikely, and insignificant. No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required.

### **3.4 WATER RESOURCES**

#### **3.4.1 Surface Water**

The Project Area is located near several unnamed ephemeral creeks that drain into Bear Den Creek and Drags Wolf Bay, both of which ultimately drain into Lake Sakakawea. Bear Den Creek, located northwest of the proposed access road, is fed by several unnamed creeks that emanate from the Project Area. Similarly, Drags Wolf Bay, located east of the Project Area, is fed by several unnamed creeks that emanate from the Project Area. Ultimately, runoff from the Project Area flows into Lake Sakakawea. As shown in Figure 5, several waterbodies are located near the Project Area. Given the topography of the area, runoff around the southern portions of the proposed access road flows into the Boggy Creek watershed and enters Lake Sakakawea via Drags Wolf Bay. Runoff on the northern portion of the proposed access road flows into Lake Sakakawea via the Bear Den Bay watershed.

The northern portion of the proposed access road is located in the Bear Den Bay watershed and the remaining southern portion of the access road is in the Boggy Creek watershed. Runoff along the northern portion of the proposed access road would flow for approximately 6 miles in a north-northwest direction into several ephemeral unnamed tributaries (hydrologic unit codes [HUCs] 10110101012019, 10110101012028, and 10110101001222) of Bear Den Creek and travel approximately 9 miles (via the unnamed tributaries and Bear Den Creek) until reaching perennial waters in Lake Sakakawea. Similarly, runoff along the southern portion of the proposed access road would flow in an easterly direction in the Boggy Creek watershed and into an approximately 11-acre wetland located approximately 0.5 mile east of the proposed access road. From the unnamed wetland, water travels into several unnamed tributaries (HUCs 10110101012057 and 10110101014755) and travels approximately 8 miles until reaching Drags Wolf Bay and Lake Sakakawea.

Environmental Assessment: Proposed Access Road Upgrade  
 Township 150 North, Range 94 West, Sections 29 and 32

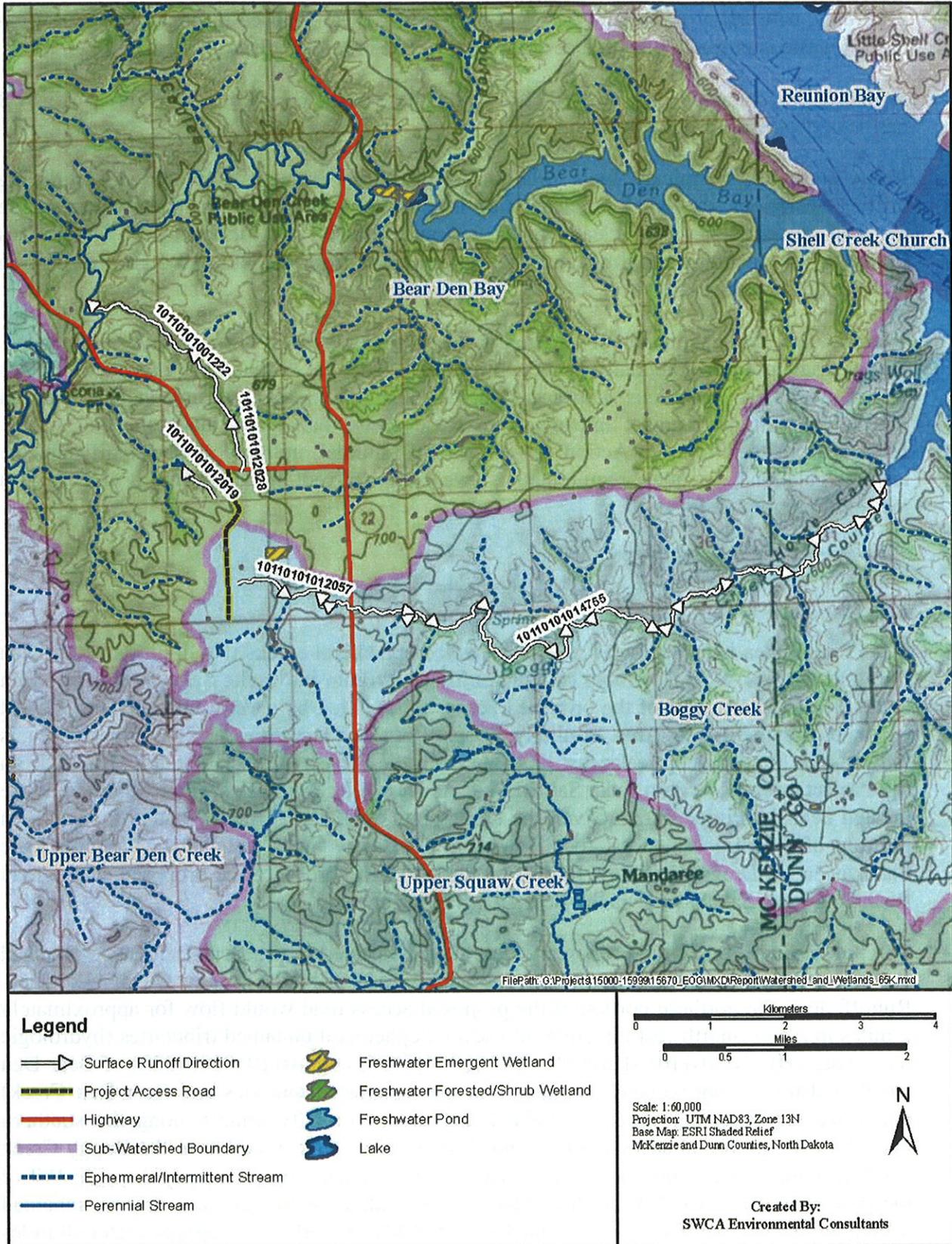


Figure 5. Project Area Watersheds and Wetlands.

The proposed access road would be engineered and constructed to minimize the suspended solid (i.e., turbidity) concentration of surface runoff and avoid disruption of drainages. Construction activities, such as grading and earth moving may impact water quality through increased sedimentation and runoff. Soil disturbance and removal of vegetative cover increases the potential for soil erosion which in turn increases sediment loading during runoff-producing storm events. The compacted soil of the proposed access road would decrease the ability of the soil to infiltrate precipitation, leading to increased runoff. The amount of runoff produced by a storm event may also increase due to soil compaction from the operation of vehicles and other construction equipment. Salts, metals, organic substances, and other pollutants present on the roads are transported in the runoff and into the surface waters which further degrade water quality.

Although no hazardous materials would be used during road construction, any chemicals or potentially hazardous materials would be handled in accordance with EOG's Spill Prevention, Control, and Countermeasure plan. Provisions established under this plan would minimize potential impacts to any surface waters associated with an accidental spill.

### **3.5 WETLANDS, HABITAT, AND WILDLIFE**

#### **3.5.1 Wetlands**

National Wetland Inventory (NWI) maps maintained by the U.S. Fish and Wildlife Service (USFWS) identify several wetlands areas in the vicinity of the proposed project corridor. According to the USFWS NWI database, several palustrine emergent (PEM) wetlands are located near the proposed access road, with the largest area located approximately 0.5 mile to the east. Three NWI delineated wetlands are located within 1 mile of the proposed access road.

Several smaller wetland areas are located near the 66-foot ROW of the proposed access road, but a wetland assessment of the project by SWCA Environmental Consultants (SWCA) in September 2009 determined that no wetlands or potentially jurisdictional waters of the U.S. would be impacted by the proposed project. Therefore, no impacts to wetlands are anticipated from this project and no permitting for wetland impacts will be required from the U.S. Army Corps of Engineers (USACE). If it is determined that wetland permitting will be required due to changes in the project design or layout, EOG will coordinate any permitting with the BIA, USACE, and appropriate state and federal agencies, and comply with all conditions of permit approval during construction.

#### **3.5.2 Wildlife**

Several wildlife species that may exist in Dunn and McKenzie counties are listed as threatened or endangered under the Endangered Species Act (ESA). Listed species in Dunn and McKenzie counties include interior least tern, whooping crane, black-footed ferret, pallid sturgeon, Gray Wolf, and piping plover (USFWS 2008a). Although delisted in 2007, the bald eagle remains a species of special concern to the BIA and the Department of the Interior, and is effectively treated the same as listed species. Tribes and states may recognize additional species of concern; such lists are taken under advisement by federal agencies, but are not

legally binding in the manner of the ESA. Species listed by either the USFWS or the state, in either Dunn or McKenzie County, are described below.

**Interior Least Tern** (*Sterna antillarum*)

**Status:** Endangered

**Likelihood of impact:** Low

The Project Area for the proposed access road is located in an upland area that is not consistent with the barren to sparsely vegetated sandbars along rivers, sand and gravel pits, or lake and reservoir shorelines that interior least terns require for breeding habitat. Least terns are typically found nesting along shorelines of islands within Lake Sakakawea, which is approximately 5 linear miles to the northeast at its closest. As a result, no suitable nesting/foraging habitats are located within the Project Area. Few to no impacts are expected.

**Whooping Crane** (*Grus americana*)

**Status:** Endangered

**Likelihood of impact:** Low

Although several PEM wetlands are located near the proposed access road, no wetland loss is anticipated from construction of the project and no wetland habitat available for migrating whooping cranes will be impacted. In addition, the lack of food sources and suitable foraging and nesting habitat makes the Project Area unsuitable for whooping cranes. No impact is anticipated.

**Black-footed Ferret** (*Mustela nigripes*)

**Status:** Endangered

**Likelihood of impact:** None

Presence of the black-footed ferret has not been confirmed in North Dakota for over 20 years and the species is presumed extirpated. No impacts are anticipated.

**Pallid Sturgeon** (*Scaphirhynchus albus*)

**Status:** Threatened

**Likelihood of impact:** Very Low

The Project Area is located in vegetated uplands approximately 5 linear miles from the Missouri River (Lake Sakakawea) and sturgeon habitat. Construction of the proposed access road is not expected to affect water quality or quantity in the river. No impacts are anticipated.

**Gray Wolf** (*Canis lupus*)

**Status:** Endangered

**Likelihood of impact:** None

The Project Area does not contain preferred gray wolf habitat or a suitable prey base to sustain a permanent pack. It is highly unlikely wolves would colonize or even transit the Project Area, given poor habitat, unreliable food supplies, nearby human habitation, and the distance to known populations in Minnesota, Canada, Montana, and Wyoming. No impacts are anticipated.

**Piping Plover** (*Charadrius melodaus*)

**Status:** Threatened

**Likelihood of impact:** Low

Although the entire shoreline of Lake Sakakawea has been designated critical habitat for piping plover, uplands are not conducive for plover foraging and nesting. Piping plover nest on sparsely vegetated shoreline beaches, peninsulas, and islands composed of sand, gravel, or shale. There are no suitable nesting/foraging habitats located within the Project Area. Impacts would only be anticipated to birds that may be foraging or traveling through the Project Area during construction of the proposed access road. Therefore, the project may affect, but is not likely to adversely affect, this species.

**Dakota Skipper** (*Hesperai dacotae*)

**Status:** Candidate

**Likelihood of impact:** Very Low

The most significant remnant populations of Dakota skipper in North Dakota are within the north-central and southeastern portions of the state. Dakota skipper habitat is defined as high-quality native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: low (wet) prairie dominated by bluestem grasses (*Schizachyrium* spp.), wood lily (*Lilium philadelphicum*), harebell (*Campanula rotundifolia*), and smooth camas (*Zigadenus elegans*); and upland (dry) prairie dominated by bluestem grasses, needlegrass (*Achnatherum* spp.), pale purple and upright coneflowers (*Ratibida* spp.), and blanketflower (*Gaillardia* spp.) (USFWS 2008b). The majority of the Project Area would be constructed on agricultural land devoid of undisturbed, native prairie areas with a high diversity of wildflowers and grasses that have not been impacted by livestock grazing. The proposed project would not affect this species.

**Bald Eagle** (*Haliaeetus leucocephalus*)

**Status:** Delisted in 2007

**Likelihood of impact:** Very Low

The Project Area is approximately 5 linear miles from the shoreline of Lake Sakakawea and does not contain suitable roosting/perching sites, concentrated feeding areas, or other suitable habitat to support a bald eagle population. Though delisted, the bald eagle is afforded some protection under the Migratory Bird Treaty Act (916 USC 703-711) and the Bald and Golden Eagle Protection Act (16 USC 668-668c). No impacts are anticipated.

**Golden Eagle** (*Aquila chrysaetos*)

**Status:** Unlisted; protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act

**Likelihood of impact:** Very Low

Eagles are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, and are a species of special concern within both the Department of the Interior and the BIA. Golden eagles favor open prairie, plains, and forested areas. Usually, golden eagles can be found in proximity to badland cliffs which provide nesting habitat. The project is approximately 5 linear miles from Lake Sakakawea and does not contain suitable soaring or roosting habitat, concentrated feeding areas, or other suitable habitat to support a golden eagle population. No impacts are anticipated.

Wildlife species observed by an ecologist during the field survey (i.e., primary observation) of the Project Area is limited to the grasshopper sparrow (*Ammodramus savannarum*). However,

secondary indicators of other species were also observed and include ground squirrels, grassland birds, ungulates, and small mammals.

Potential impacts to wildlife would come as a result of the upgrading of the existing two-track road and the vehicular traffic associated with this activity. No impact on listed threatened or endangered species is anticipated due to the low likelihood of their occurrence within the Project Area. Furthermore, on-site assessments confirmed that no threatened or endangered species habitat exists in the Project Area. Ground clearing for the access road might impact habitat for unlisted species, including small birds, small mammals, and other wildlife species.

In the effort to reduce impacts to wildlife, vehicular traffic traveling to and from the Project Area would be limited to a speed deemed appropriate for this area.

### **3.6 SOILS**

Soils in the Project Area vary depending on the topography, slope orientation, and parent material from which the soil is derived. The proposed access road is situated near the center of the Williston Basin. The Greenhorn Formation, consisting of thin limestones and dark-gray to black organic-rich shales, is found on the surface to a depth of about 4,000 feet. One of the most widespread units in the Great Plains and Rocky Mountain regions, the Greenhorn is easily subdivided into lower and upper intervals of limestone and calcareous shale and a middle interval of shale. Near-surface sediment is of Recent, Pleistocene, or Tertiary age. Sedimentary sequences recognized in this area include Sauk, Tippecanoe, Kashkaskia, Absaroka, Zuni, and Tejas.

#### **3.6.1 Natural Resources Conservation Service Soil Data**

Published soil surveys for the Project Area are updated as of 2009. Updated information is available online from the Natural Resources Conservation Service (NRCS).

Table 2 summarizes the NRCS (2009a) soil series present within the proposed access road area, and the respective acreages. The acreage shown is based on the spatial extent of soil series combinations derived from NRCS data (Figure 6); therefore, the acreage is approximate and used as a best estimate of soil series distribution for the Project Area.

**Table 2. Soil Mapping Units and Attributes**

<b>Soil Code</b>	<b>Soil Unit Name</b>	<b>Acres within 66-foot ROW of Access Road</b>
41B	Williams-Bowbells loams, 3 to 6 percent slopes	5.39
42C	Williams loam, 6 to 9 percent slopes	3.34
145F	Zahl-Cabba-Arikara complex, 9 to 70 percent slopes	0.18
44D	Zahl-Williams loams, 9 to 15 percent slopes	0.74
71C	Regent-Janesburg complex, 6 to 9 percent slopes	0.83
<b>Grand Total</b>		<b>10.48</b>

Environmental Assessment: Proposed Access Road Upgrade  
 Township 150 North, Range 94 West, Sections 29 and 32

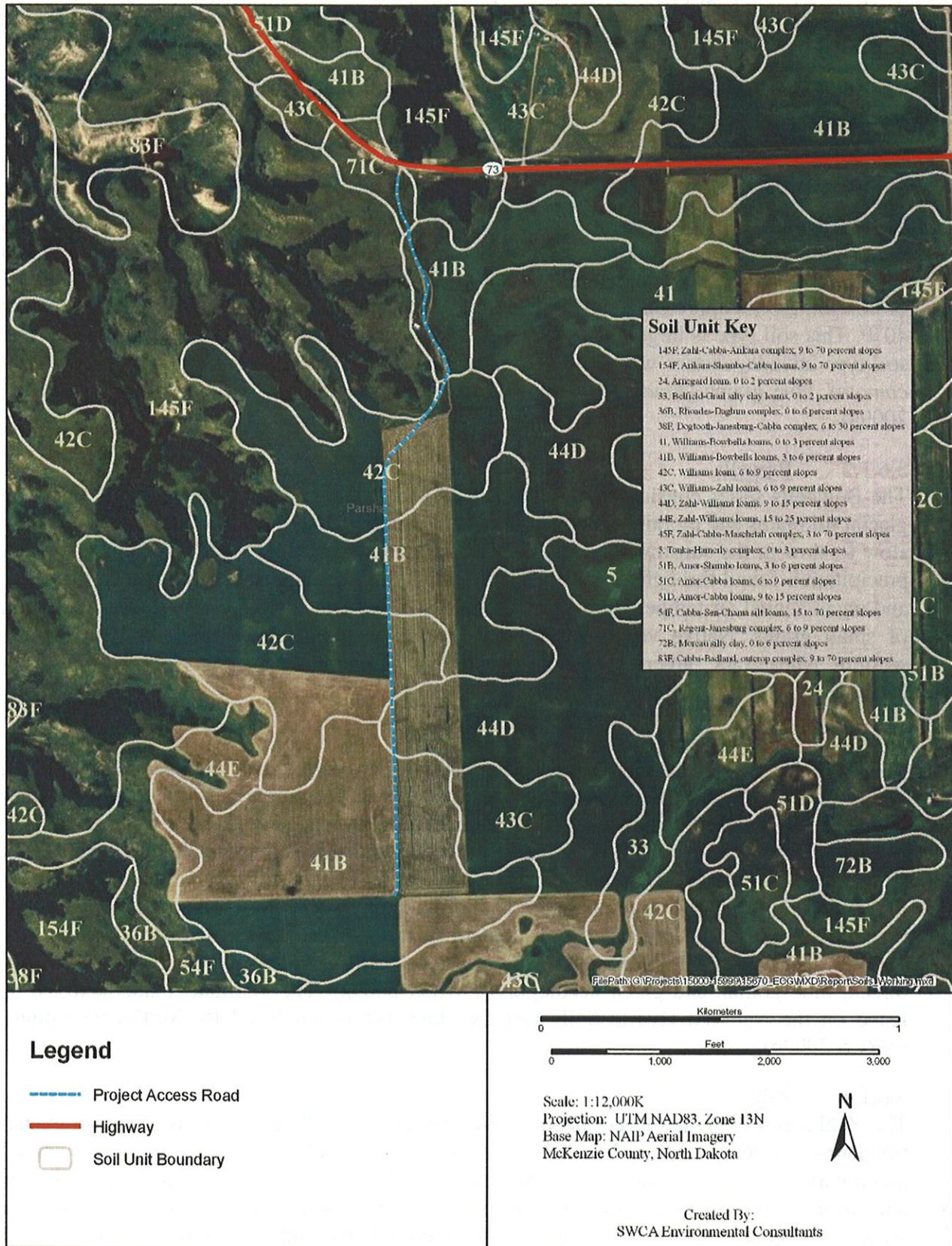


Figure 6. Approximate Spatial Extent of Soil Types within the Project Area.

As demonstrated in Table 2, the Williams-Bowells loams and Williams loam soil types are the dominant soils found in the Project Area.

The following soil series descriptions represent individual soil series reported to exist within the Project Area (NRCS 2009a). Each individual soil series does not exist individually within the Project Area but rather in combination with other soil types.

#### 3.6.1.1 Williams

The Williams series consists of very deep, slowly permeable, well drained soils found on glacial till plains and moraines with slopes ranging between 0 to 35%. Permeability is moderately slow or slow. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 14 inches and mean annual air temperature is approximately 40°F. This soil type is largely used for cultivation. Native vegetation species common to this soil type include western wheatgrass (*Pascopyrum smithii*), needle-and-thread (*Hesperostipa comata*), blue grama (*Bouteloua gracilis*), and green needlegrass (*Nasella viridula*) (NRCS 2009a).

#### 3.6.1.2 Bowells

The Bowells series consists of very deep, well and moderately well drained soils found on glacial till plains and moraines. Permeability is moderate in the upper portions and moderately slow to slow in the substratum. Slopes range from approximately 0 to 9%. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 14 inches and mean annual air temperature is approximately 42°F. This soil type is used for cultivation of small grains. Native vegetation species historically common to this soil type include western wheatgrass, green needlegrass, and big bluestem (*Andropogon gerardii*) (NRCS 2009a).

#### 3.6.1.3 Williams Loam

The Williams loams soil type is very deep, slowly permeable, well drained soils found on knolls on till plains with slopes at approximately 6 to 9%. The parent material consists of fine-loamy till. This well-drained soil exhibits a moderately low capacity to move water at its most restrictive layer. Shrink-swell potential is moderate and this soil is not flooded. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 14 inches and mean annual air temperature is approximately 40°F. This soil type is largely used for cultivation and the organic matter content in the surface horizon is approximately 4%. Native vegetation species common to this soil type include western wheatgrass, needle-and-thread, blue grama, and green needlegrass (NRCS 2009a). The Williams loams 6 to 9% is listed on the National Hydric Soils List by State, but is not listed for McKenzie County (NRCS 2009b).

#### 3.6.1.4 Zahl

The Zahl series consists of very deep, slowly permeable, well drained soils found on glacial till plains, moraines, and valley side slopes at approximately 1 to 60%. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 14 inches and mean annual air temperature is approximately 40°F. This soil type is largely used for rangeland foraging. Native vegetation species common to this soil type include western wheatgrass, little bluestem (*Schizachyrium scoparium*), and needle-and-thread (NRCS 2009a).

#### 3.6.1.5 Cabba

The Cabba series consists of shallow, well drained, moderately permeable soils found on hills, escarpments, and sedimentary plains. The soil slopes broadly range between 2 and 70%. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 16 inches and mean annual air temperature is approximately 43°F. The most common vegetation species found on this soil type are little bluestem, green needlegrass, and other various herbs, forbs, and shrub species (NRCS 2009a).

#### 3.6.1.6 Arikara

The Arikara series consists of very deep, well drained soils found on wooded slopes. Permeability is moderate with slopes ranging from approximately 9 to 70%. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 15 inches and mean annual air temperature is approximately 40°F. This soil type is used most often for woodland grazing. Native vegetation species common to this soil type include bur oak (*Quercus macrocarpa*), green ash (*Fraxinus pennsylvanica*), quaking aspen (*Populus tremuloides*), paper birch (*Betula papyrifera*), and Rocky Mountain juniper (*Juniperus scopulorum*) (NRCS 2009a).

#### 3.6.1.7 Regent

The Regent series consists of moderately deep, well drained soils found on hills and uplands on slopes ranging between 6 and 9%. The parent material consists of a clayey residuum weathered from shale. This soil has a slow permeability rate and exhibits a moderately low capacity to move water in its most restrictive layer. Shrink-swell potential is high and this soil is not flooded. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 16 inches and mean annual air temperature is 42°F. This soil type is used for cultivation of small grains, flax, hay, and pasture. Native vegetation species historically common to this soil type include western wheatgrass, green needlegrass, and big bluestem (NRCS 2009a).

#### 3.6.1.8 Janesburg

The Janesburg series consists of moderately deep, well drained soils found on upland plains on slopes ranging between 6 and 9%. The parent material consists of a clayey residuum weathered from shale. This soil has a very slow permeability rate and exhibits a low capacity to move water in its most restrictive layer. Shrink-swell potential is high and this soil is not flooded. The mean annual precipitation found throughout the spatial extent of this soil type is approximately 15 inches and mean annual air temperature is 42°F. This soil type is used for cultivation of small grains, range, and pasture. Native vegetation species historically common to this soil type include western wheatgrass, blue grama, green needlegrass, sedges (*Carex* spp.), (NRCS 2009a).

As stated, the Williams-Bowells loams and Williams loam soil types are the dominant soils found in the Project Area. Although high levels of soils erosion are not anticipated as a result of implementation of the Proposed Action, clearing and grading of the proposed access road would remove the limited vegetative cover currently on the two-track road from the affected soils which could reduce the soils' resistance to erosion. However, significant erosion is not anticipated to occur due to the presence of loamy soils and minimal slopes within the Project Area. As such, no limitations are anticipated to constrain construction activities within the

ROW. The soil types are not anticipated to create unmanageable erosion. Road design, coupled with implementation of best management practices (BMPs) by EOG, is projected to reduce and maintain negligible levels of erosion.

Unauthorized use of the proposed access road during wet conditions would deteriorate the road surface thereby decreasing effectiveness of drainage structures. Improper drainage from the proposed access road would result in elevated erosion rates downgradient and complicate reclamation efforts.

### **3.7 VEGETATION AND INVASIVE SPECIES**

The project is located in the Missouri Coteau Slope and Riverbreaks ecoregions that are characterized by western mixed-grass and short-grass prairie vegetation (Bryce et al. 1998). Common native vegetation species in the region include blue grama (*Bouteloua gracilis*), western wheatgrass (*Pascopyrum smithii*), prairie junegrass (*Koeleria macrantha*), needle-and-thread (*Stipa comata*), buffalo grass (*Buchloe dactyloides*), green needlegrass (*Nassella viridula*), and little bluestem (*Schizachyrium scoparium*). Common wetland vegetation includes various sedge species (*Carex* spp.), bulrush (*Scirpus* spp.), and cattails (*Typha* spp.). Common plant species found in woody draws, coulees, and drainages include chokecherry (*Prunus virginiana*), silver buffaloberry (*Shepherdia argentea*), and western snowberry (*Symphoricarpos occidentalis*).

Invasive species is a general term referring to species that are not native to an area, spread aggressively, and have negative economical and environmental impacts. Noxious weeds are invasive plant species that can spread easily to the detriment of public health, indigenous plant communities, livestock, recreational areas, and the management of natural or agricultural systems. The 12 weed species declared noxious under the North Dakota Century Code (Chapter 63-01.1) must be controlled by all cities and counties in North Dakota (North Dakota Department of Agriculture [NDDA] 2007). Seven of these state-listed noxious weeds are known to occur in McKenzie County, and six are known to occur in Dunn County. Table 3 summarizes the available acreage data, reported in 2007, for noxious weeds within McKenzie and Dunn counties. Table 4 shows the land cover of the Project Area. No assessments have been conducted within the Project Area to identify or quantify noxious weeds.

**Table 3. North Dakota Noxious Weed List (from NDDA 2007).**

Common Name	Scientific Name	County	
		Dunn (acres)	McKenzie (acres)
Absinth wormwood	<i>Artemisia absinthium</i>	38,600	43
Canada thistle	<i>Cirsium arvense</i>	32,800	4,300
Dalmatian toadflax	<i>Linaria dalmatica</i>	2	--
Diffuse knapweed	<i>Centaurea diffusa</i>	--	--
Field bindweed	<i>Convolvulus arvensis</i>	33,000	--
Leafy spurge	<i>Euphorbia esula</i>	10,500	1,300
Musk thistle	<i>Carduus nutans</i>	2	2
Purple loosestrife	<i>Lythrum salicaria</i>	--	--
Russian knapweed	<i>Acroptilon repens</i>	--	1
Salt cedar	<i>Tamarix ramosissima</i>	--	1
Spotted knapweed	<i>Centaurea stoebe</i>	--	1
Yellow starthistle	<i>Centaurea solstitialis</i>	--	--
<b>Total</b>		<b>114,904</b>	<b>5,648</b>

**Table 4. Project Area Land Cover Type.**

Landcover Type	Vegetation Type	Acres
Agriculture-Cultivated Crops and Irrigated Agriculture	LF 80: Agriculture	3.27
Agriculture-Pasture and Hay	LF 80: Agriculture	0.88
Mixedgrass Prairie	SRM 606: Wheatgrass-Bluestem-Needlegrass	6.28
Sand Prairie	SRM 720: Sand Bluestem-Little Bluestem Dunes	0.06
<b>Grand Total</b>		<b>10.49</b>

As presented in Table 3, Canada thistle (*Cirsium arvense*) is the most prolific noxious weed in McKenzie County and the second most abundant in Dunn County, following absinth wormwood (*Artemisia absinthium*).

As presented in Table 4, land cover within the proposed access road's 66-foot ROW is largely comprised of mixedgrass prairie and followed by agricultural uses.

Evaluation of the existing vegetation during on-site assessments conducted in August 2009 indicated no invasive species were present within the proposed access road location. However, potential disturbance of approximately 10.5 acres and removal of existing vegetation may facilitate the spread of invasive species. The mixedgrass prairie community is dominant in the proposed 66-foot ROW and, therefore, would be most impacted by the Proposed Action. Direct impacts of vegetation removal associated with the proposed access road would include long-term loss of vegetation including the modification of vegetation structure, plant species composition, and aerial extent of cover types. Removal of vegetation

results in increased soil exposure, loss of wildlife habitat, reduced plant diversity, and loss of livestock forage. Indirect impacts would include the increased potential for non-native/noxious plant establishment and introduction, accelerated wind and water erosion, changes in water runoff due to road/facility construction, soil impacts that affect plant growth (soil erosion or siltation), shifts in species composition and/or changes in vegetative density away from desirable conditions, and changes in visual aesthetics.

In an effort to reduce the spread of noxious weeds, EOG would clean and maintain construction equipment to ensure that weeds and weed seeds from other areas are not inadvertently brought into this Project Area. Any vehicle brought in from areas other than the Project Area would be thoroughly cleaned and checked to make sure it is free of any weed or weed seeds.

### **3.8 CULTURAL RESOURCES**

Cultural resources is a broad term encompassing sites, objects, or practices of archaeological, historical, cultural, and religious significance. Cultural resources on federal or tribal lands are protected by many laws, regulations, and agreements. The National Historic Preservation Act of 1966 requires a cultural resources survey of the Area of Potential Effect (APE) prior to undertaking a federal action. Resources identified are evaluated for eligibility as historic properties on the National Register of Historic Places (NRHP). Eligibility criteria (36 CFR 60.4) include association with important events or people, distinctive construction or artistic characteristics, and either a record of yielding or a potential to yield at least locally important information. Cultural properties generally are not eligible for listing on the NRHP if they lack diagnostic artifacts, subsurface remains, or structural features, but those considered eligible are treated as though they were listed on the NRHP, even when no formal nomination has been filed.

The APE of any federal undertaking must also be evaluated for significance to Native Americans from a cultural and religious standpoint. Sites and practices may be eligible for protection under the American Indian Religious Freedom Act of 1978 (AIRFA) (42 USC 1996). Sacred sites may be identified by a tribe or an authoritative individual (Executive Order 13007). Special protections are afforded to human remains, funerary objects, and objects of cultural patrimony under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001, et seq.).

Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). As a result, the BIA consults and corresponds with the THPO on all projects proposed within the Reservation. The SHPO may have useful information, but has no official role regarding proposed federal actions on trust land. The MHA Nation has also designated responsible parties for consultations and actions under NAGPRA and cultural resources generally.

A cultural resource inventory of this access road was conducted by personnel of SWCA Environmental Consultants using a pedestrian methodology. Approximately 15.75 acres were intensively inventoried on August 26, 2009 (Higgins 2009). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register of Historic Places. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on October 19, 2009; however, no response was received from the THPO within the allotted 30 day comment period (see Part 4).

### 3.9 SOCIOECONOMICS

The scope of analysis for social and economic resources includes a discussion of current social and economic data relevant to the Project Area such as population, demographics, income, employment, and housing. These conditions can be analyzed and compared at various scales. This analysis focuses on the Reservation, the four counties that overlap most of the Reservation (Dunn, McKenzie, McLean, and Mountrail), and the state of North Dakota.

#### 3.9.1 Population

Historic and current population counts for the Project Area, compared to the state, are provided below in Table 7. The state population showed little change between the last two censuses (1990–2000), but there were notable changes at the local level. Populations in Dunn and McKenzie counties declined by 5 to 11%, while populations on the Reservation increased by approximately 10%. These population changes are anticipated to continue (Rathge et al. 2002). While American Indians are the predominant group on the Reservation, they are considered the minority in all other areas of North Dakota. Over 67% of the population currently residing within the Reservation are tribal members.

**Table 5. Historic and Current Populations for the Project Area and North Dakota.**

County or Reservation	Population in 2000	% of State Population	% Change between 1990–2000	Predominant Group	Predominant Minority (Percent of Population)
Dunn	3,600	0.56	-10.1	Caucasian	American Indian (12%)
McKenzie	5,737	0.89	-10.1	Caucasian	American Indian (21%)
McLean	9,311	1.45	-11.0	Caucasian	American Indian (6%)
Mountrail	6,631	1.03	-5.6	Caucasian	American Indian (30%)
Fort Berthold Reservation	5,915	0.92	9.8	American Indian	Caucasian (27%)
Statewide	642,200	100	0.005	Caucasian	American Indian (5%)

As presented in Table 7, population growth on the Reservation far exceeds the overall growth in the state of North Dakota. This is evidenced by a 9.8% growth rate on the Reservation and a 0.005% growth rate in the state. An independent market analysis projected the state to grow by 0.4%, compared to the Reservation's 9.8% growth rate (Fort Berthold Housing Authority 2008). Although American Indians are the predominant group on the Reservation, they are the minority in the rest of the state. As of 2000, more than two-thirds of the Reservation population was tribal members.

### 3.9.2 Employment

Employment within the Project Area is typical of rural communities relying on ranching and farming, the mainstays of western North Dakota. On the Reservation, employment opportunities also consist of tribal government, tribal enterprises such as the Four Winds Casino, schools, and federal agencies. The MHA Nation's Four Bears Casino and Lodge, near New Town, employs over 320 people, 90% of which are tribal members (Three Affiliated Tribes 2008).

### 3.9.3 Income

Counties that overlap the Reservation tend to have per capita incomes, median household incomes, and employment rates which are below North Dakota statewide averages (Table 8). Subsequently, Reservation residents and MHA Nation members tend to have per capita incomes, median household incomes, and employment rates below the averages of the encompassing counties as well as statewide. Therefore, MHA Nation members are disadvantaged relative to overall Reservation incomes and unemployment rates that average in non-Indian data. Per capita income for Reservation residents is approximately 32% lower than the statewide average. The median household income reported for the Reservation (i.e., \$26,274) is likely skewed upward due to overcrowded housing conditions. This median income is approximately 64% below the statewide median. A BIA report in 2003 found that 33% of employed MHA Nation members were living below federal poverty levels. The unemployment rate reported for MHA Nation members is approximately 10.9% and 18.8% greater than the Reservation and North Dakota statewide averages, respectively (BIA 2003).

**Table 6. Income and Employment for the Project Area and State.**

Unit of Analysis	Per Capita Income	Median Household Income	Unemployment Rate (2007)	Employed but Below Poverty Level	Percent of All People in Poverty
MHA Nation members	--	--	22.0%	33%	Unknown
Fort Berthold Reservation	10,291	\$26,274	11.1%	--	Unknown
Mountrail County	29,071	\$35,981	5.7%	--	15.9%
Dunn County	27,528	\$37,632	3.8%	--	13.5%
McKenzie County	27,477	\$41,333	3.1%	--	13.8%
McLean County	32,387	\$44,421	4.6%	--	10.4%
North Dakota	31,871	\$43,936	3.1%	--	11.8%

U.S. Department of Agriculture. 2009.

### 3.9.4 Housing

Housing information is summarized in Table 9. The Fort Berthold Housing Authority manages a majority of the housing units within the Reservation. Housing typically consists of mutual help homes built through various government programs, low-rent housing units, and scattered-site homes. Housing for government employees is limited, with a few quarters in Mandaree and White Shield available to Indian Health Service employees in the Four Bears Community and to BIA employees. Private purchase and rental housing are available in New Town. New housing construction has recently increased within much of the analysis area, but availability remains low.

The proposed project is not expected to have measurable impacts on population trends or housing starts. The Proposed Action would require temporary employees during road construction. This short-term construction employment would provide some economic benefit to the communities in the Project Area.

**Table 7. Housing Units.**

Housing Development	Fort Berthold Reservation	Dunn County	McKenzie County	McLean County	Mountrail County
<b>Existing Housing</b>					
Owner-Occupied Units	1,122	1,570	2,009	4,332	2,495
Renter-Occupied Units	786	395	710	932	941
Total	1,908	1,964	2,719	5,264	3,436
New Private Housing Building Permits 2000-2005	--	18	4	135	113
<b>Housing Development Statistics</b>					
State rank in housing starts	--	51 of 53	15 of 53	21 of 53	17 of 53
National rank in housing starts	--	3,112 of 3,141	2,498 of 3,141	2,691 of 3,141	2,559 of 3,141

Source: U.S. Census Bureau 2008

### 3.10 ENVIRONMENTAL JUSTICE

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, was signed by President Bill Clinton in 1994. The Order requires agencies to advance Environmental Justice by pursuing fair treatment and meaningful involvement of minority and low-income populations. Fair treatment means such groups should not bear a disproportionately high share of negative environmental consequences from federal programs, policies, decisions, or operations. Meaningful

involvement means federal officials actively promote opportunities for public participation and federal decisions can be materially affected by participating groups and individuals.

The EPA headed the interagency workgroup established by the 1994 Order and is responsible for related legal action. Working criteria for designation of targeted populations are provided in Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (EPA 1998). This guidance uses a statistical approach to consider various geographic areas and scales of analysis to define a particular population's status under the Order.

Environmental Justice is an evolving concept with potential for disagreement over the scope of analysis and the implications for federal responsiveness. It is nevertheless clear that tribal members on the Great Plains qualify for special Environmental Justice consideration as both a minority and low-income population. The populations of both North and South Dakota are predominantly Caucasian. While American Indians are the dominant group on the Reservation, they comprise only 5% of North Dakota residents. Even in a state with relatively low per capita and household income, Indian individuals and households are distinctly disadvantaged.

Potential impacts to tribes and tribal members include disturbance of cultural resources. There is potential for disproportionate impacts, especially if the impacted tribes and members do not reside within the Reservation and therefore do not share in direct or indirect benefits. This potential is significantly reduced following the survey of the proposed road location. No properties are known to be present that qualify as traditional or cultural properties or for protection under AIRFA. The potential for impacts is further mitigated by requirements for immediate work stoppage following an unexpected discovery of cultural resources of any type. Mandatory consultations would take place during any such work stoppage, affording an opportunity for all affected parties to assert their interests and contribute to an appropriate resolution, regardless of their home location or tribal affiliation.

The proposed project has not been found to pose a threat for significant impact to any other critical element including air quality, public health and safety, water quality, wetlands, wildlife, soils, or vegetation within the human environment. Through the avoidance of such impacts, no disproportionate impact is expected to low-income or minority populations. No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required.

### **3.11 MITIGATION AND MONITORING**

Many protective measures and procedures are described in this document. No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required. Monitoring of cultural resource impacts by qualified personnel is recommended during all ground-disturbing activities. Construction would be monitored by the BIA, and representatives of the MHA Nation to ensure the protection of cultural, archaeological, and natural resources.

### **3.12 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

Potential resource commitments associated with upgrading and construction of the access road include soil lost through wind and water erosion, cultural resources inadvertently destroyed, wildlife killed during earthmoving or in collisions with vehicles, and energy expended during construction.

### **3.13 SHORT-TERM USE OF THE ENVIRONMENT VERSUS LONG-TERM PRODUCTIVITY**

The approximately 10.5 acres or 1.3-mile area dedicated to the proposed access road would be unavailable for livestock grazing, wildlife habitat, and other uses. Because the Project Area is an existing two-track road, the area is not an ideal location for these short-term uses. Access roads and work areas would be leveled or backfilled as necessary, scarified, re-contoured and re-seeded. Exceptions to these reclamation measures might occur if the BIA approves assignment of an access road either to the BIA roads inventory or to concurring surface allottees. Any grazing allottees to which compensation for land disturbance is owed will be properly compensated for the loss of land use.

### **3.14 CUMULATIVE IMPACTS**

Environmental impacts may accumulate either over time or in combination with similar events in the area. Unrelated and dissimilar activities may also have negative impacts on critical elements, thereby contributing to cumulative degradation of the environment. Past and current disturbances in the vicinity of the Project Area include farming, grazing, roads, and oil and gas development. Reasonably foreseeable future impacts must also be considered. Current farming and ranching is expected to continue with little change, since virtually all available acreage is already organized into range units to utilize surface resources for economic benefit. Undivided interests in the land surface, range permits, and agricultural leases are often held by different tribal members than those holding sub-surface rights.

The major foreseeable activity with potential to impact critical elements of the human environment is oil field development. Over the past several years, exploration has increased. Most of this exploration has taken place outside the Reservation boundary on fee land, but for purposes of cumulative impact analyses, land ownership and the Reservation boundary are immaterial. Current impacts from existing activity in the area, such as other road development and oil and gas-related activities are still fairly dispersed. No significant negative impacts are expected to any critical element of the human environment; impacts would generally be low and mostly temporary from implementation of the proposed action.

Within the Reservation and near the Project Area, development projects remain few and widely dispersed. At this time, the proposed access road would access one proposed well located on private lands with private minerals. However, this may change in the future as new exploratory wells may be proposed, though such developments are merely speculation until Applications for Permit to Drill are submitted for approval. Additional cumulative impact analyses and BIA approvals are required before the surface is disturbed at any other location.

It is anticipated that the pace and level of natural gas development within this region of the state will continue at the current rate over the next few years and contribute to cumulative air quality impacts. Although the proposed access road would negligibly contribute to emissions, largely due to fugitive dust and vehicular emissions, any contribution would be localized, largely temporary, and limited in comparison with regional emissions. Therefore, it is unlikely that the project would significantly impact the cumulative air quality of the region.

The proposed access road, when combined with other actions (cattle grazing, oil and gas development, and agriculture) that are likely to occur in and near the Project Area in the future, would increase sedimentation and runoff rates. Sediment yield from active roadways could occur at higher rates than background rates and continue indefinitely. Thus, the proposed access road could incrementally add to existing and future sources of water quality degradation in the Bear Den Bay and Boggy Creek watersheds. However, increases in degradation would be reduced by EOG's commitment to using erosion control measures as necessary, and implementing BMPs designed to reduce impacts.

As previously stated, because active roadways are not typically reclaimed, sediment yield from roads can continue indefinitely at rates two to three times the background rate. The proposed access road would incrementally add to existing and future impacts to soil resources in the general area. However, EOG is committed to using BMPs to mitigate these effects. BMPs would include implementing erosion and sedimentation control measures, such as installing culverts with energy dissipating devices at culvert outlets to avoid sedimentation in ditches, constructing water bars along side slopes, planting cover crops to stabilize soil following construction and before permanent seeding takes place.

Vegetation in and around the Project Area could be affected by various activities, including energy development and surface disturbance of quality native prairie areas that have been largely undisturbed by development activities, grazing, and agriculture. Indirect impacts to native vegetation may be possible due to soil loss, compaction, and increased encroachment of unmanaged invasive weed species. Potential future oil and gas development within the Reservation could result in the loss, and further fragmentation, of native mixed-grass prairie habitat. Past, present, and reasonably foreseeable future activities within the general area have reduced, and would likely continue to reduce, the amount of available habitat for listed species.

Significant archaeological resources are irreplaceable and often unique; any destruction or damage of such resources can be expected to diminish the archaeological record as a whole. However, no such damage or destruction of significant archaeological resources is anticipated as a result of the Proposed Action, as these resources would be avoided, negating the cumulative impacts to the archaeological record.

The proposed access road would not incrementally add to existing and future socioeconomic impacts in the general area. Construction of the proposed access road would temporarily increase employment, but would only require a small crew of workers. Therefore, little change in employment would be expected over the long term.

## **4.0 CONSULTATION AND COORDINATION**

The BIA must continue to make efforts to solicit the opinions and concerns of all stakeholders. For the purpose of this EA, a stakeholder is considered any agency, municipality, or individual person to which the Proposed Action may affect either directly or indirectly in the form of public health, environmental, or socioeconomic issues. A scoping letter declaring the location of the proposed access road and explaining the action proposed was sent in advance of this EA to allow stakeholders ample time to submit comments or requests for additional information. A summary of the stakeholder responses are listed in Table 10. Additionally, a copy of this EA should be submitted to all federal agencies with interests either in, near, or potentially affected by the Proposed Action.

**Table 8. Scoping Comments.**

Name	Organization	Comment	Response to Comment
Bagley, Lonny	Bureau of Land Management	No Comment	
Benson, Barry	Three Affiliated Tribes	No Comment	
Berg, George	NoDak Electric Cooperative, Inc.	No Comment	
Black, Mike	Bureau of Indian Affairs	No Comment	
Boyd, Bill	Midcontinent Cable Company	No Comment	
Brady, Perry	THPO, Three Affiliated Tribes	No Comment	
Brien, David	Chairman, Turtle Mountain Band of Chippewa	No Comment	
Brugh, V. Judy	Three Affiliated Tribes	No Comment	
Cayko, Richard	McKenzie County	No Comment	
Christenson, Ray	Southwest Water Authority	No Comment	
Cimarosti, Daniel	U.S. Army Corps of Engineers	An application was sent. In case there will be discharge of fill materials in waters of the U.S. Request a copy of the EA to be sent to johnathan.shellman@usace.army.mil.	Noted.
Crooke, Patsy	U.S. Army Corps of Engineers	No Comment	
U.S. Army Corps of Engineers, Omaha District	Garrison Project Office	No Comment	
Danks, Marvin	Fort Berthold Rural Water Director	No Comment	
Dhieux, Joyce	U.S. Environmental Protection Agency	No Comment	
Dixon, Doug	Montana Dakota Utilities	No Comment	
Dressler, Patricia	Federal Aviation Administration	No Comment	
Erickson, Carroll	Ward County Board of Commissioners	No Comment	
Fitzpatrick, Barbara	Federal Emergency Management Agency	Check if the property is located within a mapped Special Flood Hazard Area	The project is not in a flood hazard area.
Flores, J.R.	U.S. Department of Agriculture	No Comment	
Fox, Fred	Three Affiliated Tribes	No Comment	
Glatt, David	North Dakota Department of Health	The department believed that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods.	None.
Glover, John	U.S. Department of Agriculture, Natural Resources Conservation Service	The project would not impact any agriculture lands.	None.
Gorton, Candace	U.S. Army Corps of Engineers	No Comment	
Guzman, Frank	U.S. Forest Service	No Comment	

*Environmental Assessment: Proposed Access Road Upgrade  
Township 150 North, Range 94 West, Sections 29 and 32*

<b>Name</b>	<b>Organization</b>	<b>Comment</b>	<b>Response to Comment</b>
Hall, Joseph	U.S. Department of the Interior	No Comment	
Hall, Todd	Three Affiliated Tribes	No Comment	
Hanson, Jesse	North Dakota Parks and Recreation	The project would not affect state park lands or Land And Water Conservation Fund projects.	None.
Hauck, Reinhard	Dunn County	No Comment	
His Horse Is Thunder, Ron	Chairman, Standing Rock Sioux Tribe	No Comment	
Hoffman, Warren	Kildeer, Weydahl Field	No Comment	
Hovda, Roger	Reservation Telephone Cooperative	No Comment	
Hudson-Schenfisch, Julie	McLean County Board of Commissioners	No Comment	
Hynek, David	Chair, Mountrail Board of County Commissioners	No Comment	
Johnson, Harley	New Town Municipal Airport	No Comment	
Kadrmaz, Ray	Dunn County	No Comment	
Kuehn, John	Parshall-Hankins Field Airport	No Comment	
Kulas, Cheryl	Indian Affairs Commission	No Comment	
Laux, Eric	U.S. Army Corps of Engineers	No Comment	
Lindemann, Larry	Airport Manager, Barnes County Municipal Airport	No Comment	
Manager	Xcel Energy	No Comment	
McKenna, Mike	North Dakota Game and Fish Department	No objections to the project provided any wetlands impacts are mitigated and disturbed areas are seeded with native species.	Noted.
Melhouse, Ronald	Bureau of Reclamation	There are waterlines exiting or proposed in the vicinity the project.	The proposed access road alignment would not impact existing or proposed waterlines.
Mercer County	Mercer County Board of Commissioners	No Comment	
Miller, Ken	Northern Border Pipeline Company	No Comment	
Missile Engineer, Chief	Minot Air Force Base	No Comment	
NAGPRA Office	Three Affiliated Tribes	No Comment	
Nash, Mike	Bureau of Land Management	No Comment	
Natural Resources Department	Three Affiliated Tribes	No Comment	
Nelson, Richard	U.S. Bureau of Reclamation	No Comment	
Obenauer, Steve	Federal Aviation Administration	No Comment	
Olson, Frances	McKenzie County	No Comment	

*Environmental Assessment: Proposed Access Road Upgrade  
Township 150 North, Range 94 West, Sections 29 and 32*

Name	Organization	Comment	Response to Comment
Paaverud, Merl	State Historical Society	SHPO requests that a copy of the cultural resources site forms and reports be sent to their office.	None.
Packineau, Mervin	Three Affiliated Tribes	No Comment	
Paulson, Gerald	Western Area Power Administration	No Comment	
Pearson, Myra	Spirit Lake Sioux Tribe	No Comment	
Peterson, Walter	North Dakota Department of Transportation	No Comment	
Poitra, Fred	Three Affiliated Tribes	No Comment	
Prchal, Doug	North Dakota Parks and Recreation Department	No Comment	
Representative, Mandaree Segment	Three Affiliated Tribes	No Comment	
Roth, Sandy	Northern Border Pipeline Company	No Comment	
Rudolph, Reginald	McLean Electric Cooperative, Inc.	No Comment	
Schelkoph, David	West Plains Electric Cooperative, Inc.	No Comment	
Selvage, Michael	Chairman, Sisseton-Wahpeton Sioux Tribe	No Comment	
Svoboda, Larry	U.S. Environmental Protection Agency	No Comment	
Thompson, Brad	U.S. Army Corps of Engineers	Ensure that the project is in compliance with floodplain management criteria and a Section 404 permit would be required for any placement of dredged or fill material into waters of the U.S.	Noted.
Thorson, Gary	McKenzie Electric Cooperative	No Comment	
Towner, Jeffrey	U.S. Fish and Wildlife Service	Believes the project can be completed without long-term impacts to fish and wildlife resources, provided erosion control measures are taken during construction.	Noted.
U.S. Department of the Interior	National Park Service, Midwest Region	No Comment	
Vodehnal, Dale	U.S. Environmental Protection Agency	No Comment	
Wells, Marcus	Chairman, Three Affiliated Tribes	No Comment	
Whitcalf, Frank	Three Affiliated Tribes	No Comment	
Williams, Damon	Three Affiliated Tribes	No Comment	
Wolf, Malcolm	Three Affiliated Tribes	No Comment	

### **List of Preparers**

An interdisciplinary team contributed to this document, following guidance in Part 1502.6 of CEQ regulations. This document was drafted by SWCA under the direction of the BIA. Information was compiled from various sources within SWCA.

### **EOG Resources, Inc.**

- Heather Smith, NEPA Coordinator

### **SWCA Environmental Consultants**

- Chad Baker, Project Manager/ Environmental Specialist  
*Prepared the EA*
- Matt Loscalzo, Natural Resource Planner  
*Prepared the EA*
- Courtney Higgins, Archaeologist  
*Conducted cultural resource literature review and prepared the EA*
- Amarina Wuenschel, GIS Specialist  
*Created maps and spatially derived data*

## **5.0 REFERENCES**

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## **6.0 ACRONYMS**

<b>°F</b>	degrees Fahrenheit
<b>AAQM</b>	Ambient Air Quality Monitoring (site)
<b>AIRFA</b>	American Indian Religious Freedom Act
<b>APE</b>	Area of Potential Effect
<b>BIA</b>	Bureau of Indian Affairs
<b>BMP</b>	Best Management Practice
<b>CAA</b>	Clean Air Act
<b>CEQ</b>	Council on Environmental Quality
<b>CFR</b>	Code of Federal Regulations
<b>CMP</b>	Corrugated metal pipe
<b>EA</b>	Environmental Assessment
<b>EIS</b>	Environmental Impact Statement
<b>EOG</b>	EOG Resources, Inc.
<b>EPA</b>	Environmental Protection Agency
<b>ESA</b>	Endangered Species Act
<b>HUC</b>	hydrologic unit code
<b>MHA Nation</b>	Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation
<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NAGPRA</b>	Native American Graves Protection and Repatriation Act
<b>NDDH</b>	North Dakota Department of Health
<b>NEPA</b>	National Environmental Policy Act
<b>NRCS</b>	Natural Resources Conservation Service
<b>NRHP</b>	National Register of Historic Places
<b>NWI</b>	National Wetland Inventory
<b>PEM</b>	palustrine emergent
<b>PSD</b>	Prevention of Significant Deterioration
<b>ROW</b>	right-of-way
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>SHPO</b>	State Historic Preservation Officer
<b>SWCA</b>	SWCA Environmental Consultants, Inc.
<b>TCP</b>	Traditional Cultural Property
<b>THPO</b>	Tribal Historic Preservation Officer
<b>USC</b>	United States Code
<b>USACE</b>	U.S. Army Corps of Engineers
<b>USFWS</b>	U.S. Fish and Wildlife Service



Denver Office  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021  
Tel 303.487.1183 Fax 303.487.1245  
www.swca.com

Dear Interested Party:

The Bureau of Indian Affairs (BIA) is preparing an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) for a proposed road construction project. The proposed action includes approval by the BIA for the construction of a road approximately 1.3 miles in length located on the Fort Berthold Indian Reservation by EOG Resources, Inc. (EOG). The proposed road is located in Sections 29 and 32, Township 149 North, Range 94 West in McKenzie County, North Dakota (see Figure A for project location). The proposed road can be accessed from the town of Mandaree by traveling west on BIA 12 for approximately 1.3 miles, north on Highway 22 for approximately 3.6 miles, and west on Highway 73 for approximately 0.9 mile.

EOG requests a 66-foot-wide right-of-way (ROW) for 1.3 miles of subject access road, 1,333 feet of which are located in Section 29 and 5,535 feet of which are located in Section 32. The proposed road is currently an unimproved two-track which would be upgraded and used to access a proposed well in the NW/NW corner of Section 5 on private lands with private minerals. The two-track would be upgraded to an all-season road with stormwater improvements. The road would be crowned and ditched with a 24-foot running surface and approximately 4 inches of scoria or gravel on the surface. All material for the road upgrade would be borrowed from within the 66-foot ROW. As shown in Figure B, three 24-inch and one 18-inch corrugated metal pipe culverts would be installed in the road. One cattle guard would be installed at the entrance to the road from Highway 73.

EOG requests use of the existing unimproved two-track in an effort to reduce potential impacts to land resources since a new road would not need to be built in the same area to access mineral leases. A pre-onsite meeting was conducted with the BIA on August 26, 2009, during which the proposed road was evaluated and biological and cultural resource surveys were conducted. A ROW onsite was conducted with the Bureau of Land Management on September 21, 2009.

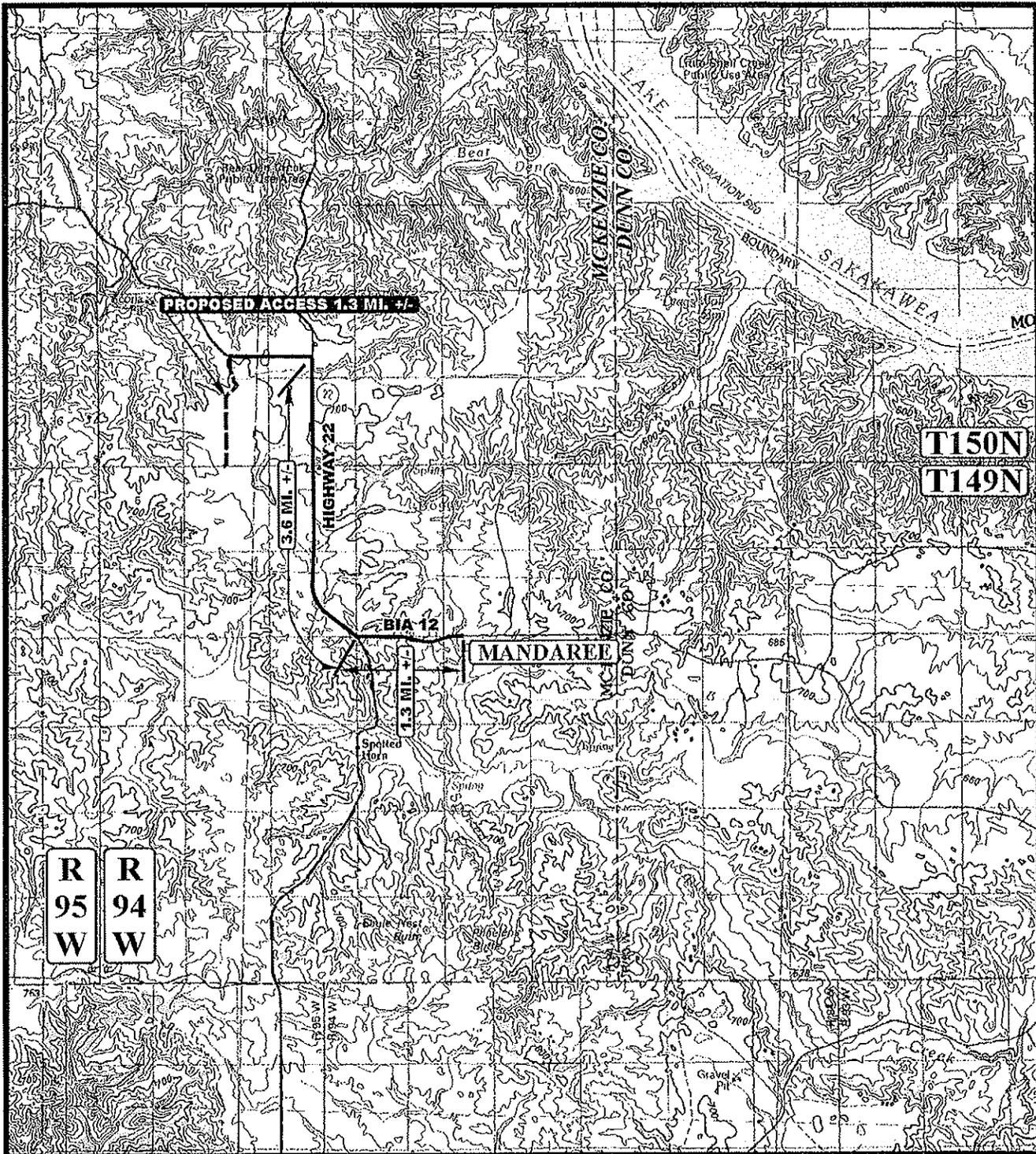
To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action, pursuant to Section 102(2)(D)(IV) of NEPA, as amended. We are interested in developments proposed or underway that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted. Please send your replies and requests for additional project information to:

SWCA Environmental Consultants  
Chad Baker, Project Manager  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021  
(303) 487-1183  
Chaker@swca.com

Comments should be submitted before October 29, 2009, so that they may be addressed in the final document. Questions for the BIA can be directed to Marilyn Bercier, NEPA Coordinator, at (605) 226-7656.

Sincerely,

Chad Baker  
Project Manager



**LEGEND:**

**EOG RESOURCES, INC.**

N

**ROAD  
RIGHT OF WAY APPLICATION  
SECTIONS 29 & 32, T150N, R94W, 5th P.M.**

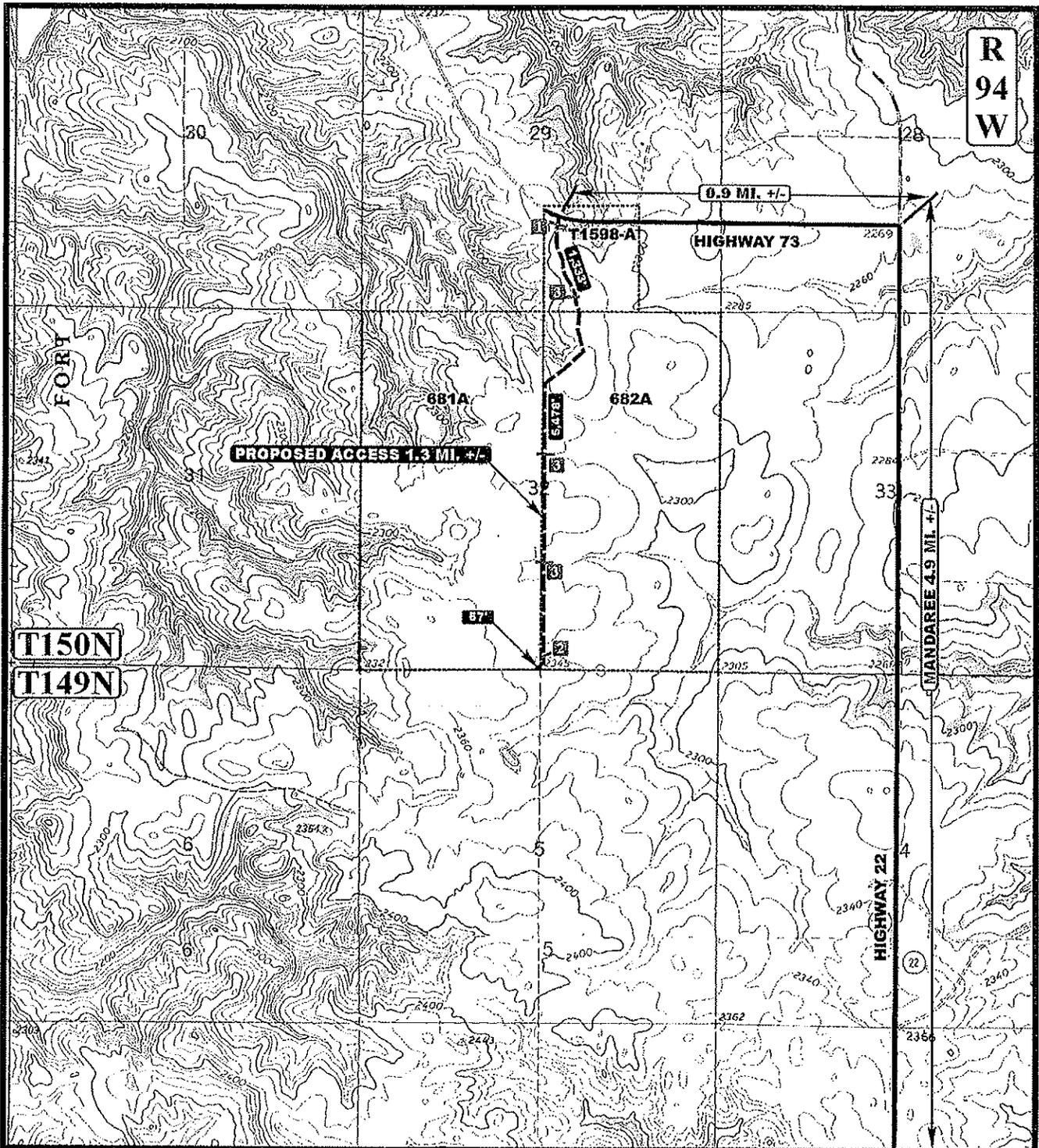


**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1815



**TOPOGRAPHIC MAP**  
 09 11 09  
 MONTH DAY YEAR  
 SCALE: 1:100,000 DRAWN BY: J.H. REVISED: 09-29-09





**LEGEND:**

- EXISTING ROAD
- - - - - PROPOSED ACCESS ROAD
- ☐ INSTALL CATTLE GUARD
- ☑ INSTALL 24" CMP
- ☒ INSTALL 18" CMP

**EOG RESOURCES, INC.**

**ROAD**  
**RIGHT OF WAY APPLICATION**  
**SECTIONS 29 & 32, T150N, R94W, 5th P.M.**

**U&L S** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC** 09 | 11 | 09  
**MAP** MONTH | DAY | YEAR  
 SCALE: 1" = 2000' DRAWN BY: J.H. REVISED: 09-29-09 **B**  
**TOPO**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, OMAHA DISTRICT  
NORTH DAKOTA REGULATORY OFFICE  
1513 SOUTH 12<sup>TH</sup> STREET  
BISMARCK ND 58504-6640

October 20, 2009

North Dakota Regulatory Office

[NWO-2009-2512-BIS]

SWCA Environmental Consultants  
Attn: Chad Baker, Project Manager  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021

Dear Mr. Baker:

This is in response to a letter received October 2, 2009 requesting Department of the Army, U.S. Army Corps of Engineers (Corps) comments regarding the construction of a 1.3 mile access road northwest of Mandaree, North Dakota in Sections 29 and 32, Township 150 North, Range 94 West, McKenzie County by EOG Resources, Inc.

Corps regulatory offices administer Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates work impacting navigable waters. Work over, in, or under navigable waters is considered to have an impact. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in the waters of the United States.

Please submit a location map and completed Corps permit application (copy enclosed) describing all proposed work and construction methodology, to the letterhead address if a Section 10/404 permit is required.

Do not hesitate to contact this office by letter or telephone (701-255-0015) if we can be of further assistance.

Sincerely,

Daniel E. Cimarosti  
Regulatory Program Manager  
North Dakota

Enclosure

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT**  
(33 CFR 325)

**OMB APPROVAL NO. 0710-0003**  
**EXPIRES: 31 August 2012**

Public reporting burden for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

**PRIVACY ACT STATEMENT**

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

**(ITEMS BELOW TO BE FILLED BY APPLICANT)**

5. APPLICANT'S NAME: First -                      Middle -                      Last - Company - E-mail Address -			8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) First -                      Middle -                      Last - Company - E-mail Address -		
6. APPLICANT'S ADDRESS. Address - City -                      State -                      Zip -                      Country -			9. AGENT'S ADDRESS Address - City -                      State -                      Zip -                      Country -		
7. APPLICANT'S PHONE NOs. W/AREA CODE. a. Residence                      b. Business                      c. Fax			10. AGENT'S PHONE NOs. W/AREA CODE a. Residence                      b. Business                      c. Fax		

**STATEMENT OF AUTHORIZATION**

11. I hereby authorize, \_\_\_\_\_ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

\_\_\_\_\_  
APPLICANT'S SIGNATURE

\_\_\_\_\_  
DATE

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE (see instructions)	
13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) Address City -                      State -                      Zip -
15. LOCATION OF PROJECT Latitude: °N Longitude: °W	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID                      Municipality Section -                      Township -                      Range -	
17. DIRECTIONS TO THE SITE	

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

**USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED**

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
-------------------------------	-------------------------------	-------------------------------

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres  
Or  
Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes  No  IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address --  
City -- State -- Zip --

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
--------	----------------	-----------------------	--------------	---------------	-------------

\* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

\_\_\_\_\_  
SIGNATURE OF APPLICANT

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE OF AGENT

\_\_\_\_\_  
DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Block 20. Reasons for Discharge.** If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

**Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards.** Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

**Block 22. Surface Areas of Wetlands or Other Waters Filled.** Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

**Block 23. Description of Avoidance, Minimization, and Compensation.** Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

**Block 24. Is Any Portion of the Work Already Complete?** Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

**Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site.** List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

**Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.**

**Block 26. Information about Approvals or Denials by Other Agencies.** You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

**Block 27. Signature of Applicant or Agent.** The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

## **DRAWINGS AND ILLUSTRATIONS**

### **General Information.**

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

U.S. Department of Homeland Security  
Region VIII  
Denver Federal Center, Building 710  
P.O. Box 25267  
Denver, CO 80225-0267



**FEMA**

R8-Mitigation

October 7, 2009

Chad Baker  
SWCA Environmental Consultants  
295 Interlocken Blvd., Suite 300  
Broomfield, CO 80021

Dear Mr. Baker:

Thank you for your inquiry regarding the proposed road construction on the Fort Berthold Reservation. FEMA's major concern is if the property is located within a mapped Special Flood Hazard Area, as development in these areas requires further consideration.

We recommend that you contact the local Floodplain Manager, Cliff Whitman, DES Director for the Fort Berthold Reservation at 701-627-4805, to receive further guidelines regarding the impact that the road construction might have to the regulations and policies of the National Flood Insurance Program. Considering that floods are the most devastating of all natural disasters in this country, any efforts to reduce the impacts of that hazard is a worthwhile.

Let me know if I can be of assistance and please feel free to contact me at 303-235-4715. Thank you for giving us the opportunity to assist you in the impending road construction on the Fort Berthold Reservation.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Fitzpatrick".

Barbara Fitzpatrick  
Senior Program Specialist  
Mitigation Division, FM &I Branch



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION  
Gold Seal Center, 918 E. Divide Ave.  
Bismarck, ND 58501-1947  
701.328.5200 (fax)  
www.ndhealth.gov



October 6, 2009

SWCA Environmental Consultants  
Chad Baker, Project Manager  
295 Interlocken Boulevard, Suite 300  
Broomfield, CO 80021

Re: Proposed Road Construction Project  
Sec 29 & Sec 32, T 150N, R 94W  
McKenzie County, North Dakota

Dear Mr. Baker:

This department has reviewed the information concerning the above-referenced project with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.
2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
3. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Projects located within tribal boundaries are required to obtain a permit from the U.S. Environmental Protection Agency. Further information on the storm water permit may be obtained from the U.S. EPA's website or by calling the U.S. EPA – Region 8 at 303-312-6312. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.

Environmental Health  
Section Chief's Office  
701.328.5150

Division of  
Air Quality  
701.328.5188

Division of  
Municipal Facilities  
701.328.5211

Division of  
Waste Management  
701.328.5166

Division of  
Water Quality  
701.328.5210

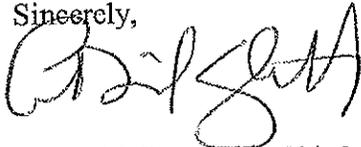
4. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. Noise effects can also be minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



L. David Glatt, P.E., Chief  
Environmental Health Section

LDG:cc  
Attach.



## Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

### **Soils**

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

### **Surface Waters**

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

### **Fill Material**

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

United States Department of Agriculture



Natural Resources Conservation Service  
P.O. Box 1458  
Bismarck, ND 58502-1458

October 15, 2009

Chad Baker  
SWCA Environmental Consultants  
Denver Office  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021

RE: Road improvement in sections 29 & 32, T149N, R94W, 5<sup>th</sup> P.M. McKenzie County, North Dakota

Dear Mr. Baker

The Natural Resources Conservation Service (NRCS) does not have any comment to the proposed activities. NRCS addresses impacts to prime farmlands and wetlands on agricultural lands. The information provided to us indicates the location of these project activities to be entirely within the existing road right of way and does not impact any agricultural lands. If this is not the case, please provide us more details of the project.

Thank you for the opportunity to review and comment on this project. Should you require additional information, discussion, or clarification, please contact Donald E. Felch at 701-530-2023.

Sincerely,

  
ACTING JOHN GLOVER  
Acting State Conservationist

cc:  
Kyle S. Hartel, DC, NRCS, Watford City, ND  
Terrance J. Gisvold, ASTC (FO), Dickinson, ND

*Helping People Help the Land*

An Equal Opportunity Provider and Employer





John Hoeven, Governor  
Douglass A. Prchal, Director

1600 East Century Avenue, Suite 3  
Bismarck, ND 58503-0649  
Phone 701-328-5357  
Fax 701-328-5363  
E-mail [parkrec@nd.gov](mailto:parkrec@nd.gov)  
[www.parkrec.nd.gov](http://www.parkrec.nd.gov)

October 16, 2009

SWCA Environmental Consultants  
Chad Baker, Project Manager  
295 Interlocken Boulevard, Suite 300  
Broomfield, CO 80021

Re: Road Construction Project

Dear Mr. Baker:

The North Dakota Parks and Recreation Department has reviewed the above referenced proposal to construct a road located in Sections 29 and 32, T150N, R94W, McKenzie County.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare species and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

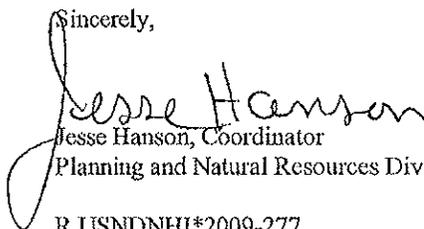
The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, there are no known occurrences within or adjacent to the project area.

Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

Thank you for the opportunity to comment on this project. Please contact Kathy Duttonhefner (701-328-5370 or [kgduttonhefner@nd.gov](mailto:kgduttonhefner@nd.gov)) of our staff if additional information is needed.

Sincerely,

  
Jesse Hanson, Coordinator  
Planning and Natural Resources Division  
R.USNDNHI\*2009-277

.....  
*Play in our backyard!*



"VARIETY IN HUNTING AND FISHING"

**NORTH DAKOTA GAME AND FISH DEPARTMENT**

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

October 21, 2009

Chad Baker  
Project Manager  
SWCA Environmental Consultants  
295 Interlocken Boulevard, Suite 300  
Broomfield, CO 80021

Dear Mr. Baker:

RE: EOG Resources Road Construction Project  
Fort Berthold Indian Reservation

This project consists of constructing approximately 1.3 miles of road to access a proposed well in Section 5 NWNW, T149N, R94W. An existing unimproved two-track would be utilized in an effort to reduce potential impacts to land resources.

The North Dakota Game and Fish Department has no objections to this project provided any unavoidable destruction or degradation of wetland acres are mitigated in kind, and disturbed areas are seeded with suitable native grass and forb species where appropriate.

Sincerely,

A handwritten signature in cursive script that reads "Steve Dyke".

(for) Michael G. McKenna  
Chief  
Conservation & Communication Division

js



DK-5000  
ENV-6.00

# United States Department of the Interior

## BUREAU OF RECLAMATION

Dakotas Area Office  
P.O. Box 1017  
Bismarck, North Dakota 58502



OCT 6 2000

Mr. Chad Baker  
Project Manager  
SWCA Environmental Consultants  
295 Interlocken Boulevard, Suite 300  
Broomfield, CO 80021

Subject: Solicitation for Environmental Assessment for Construction of a 1.3 Miles in Length Access Road on the Fort Berthold Reservation in McKenzie County, North Dakota

Dear Mr. Baker:

This letter is written to inform you that your letter was received on October 2 and the information and maps have been reviewed by Bureau of Reclamation staff.

Road construction in McKenzie County could potentially affect Reclamation facilities in the form of the rural water pipelines of the Fort Berthold Rural Water System. There are water lines existing or proposed for construction in the vicinity of the proposed access road project in section 29 but not in section 32, T. 150 N., R. 94 W.

We are providing a map depicting the water pipeline alignments in section 29, T. 150 N., R. 94 W. Since Reclamation is the lead Federal agency for the Fort Berthold Rural Water System, we request that any work planned on the reservation be coordinated with Mr. Marvin Danks, Fort Berthold Rural Water Director, Three Affiliated Tribes, 308 4 Bears Complex, New Town, North Dakota 58763.

Thank you for providing the information and opportunity to comment. If you have any further questions, please contact me at 701-221-1288.

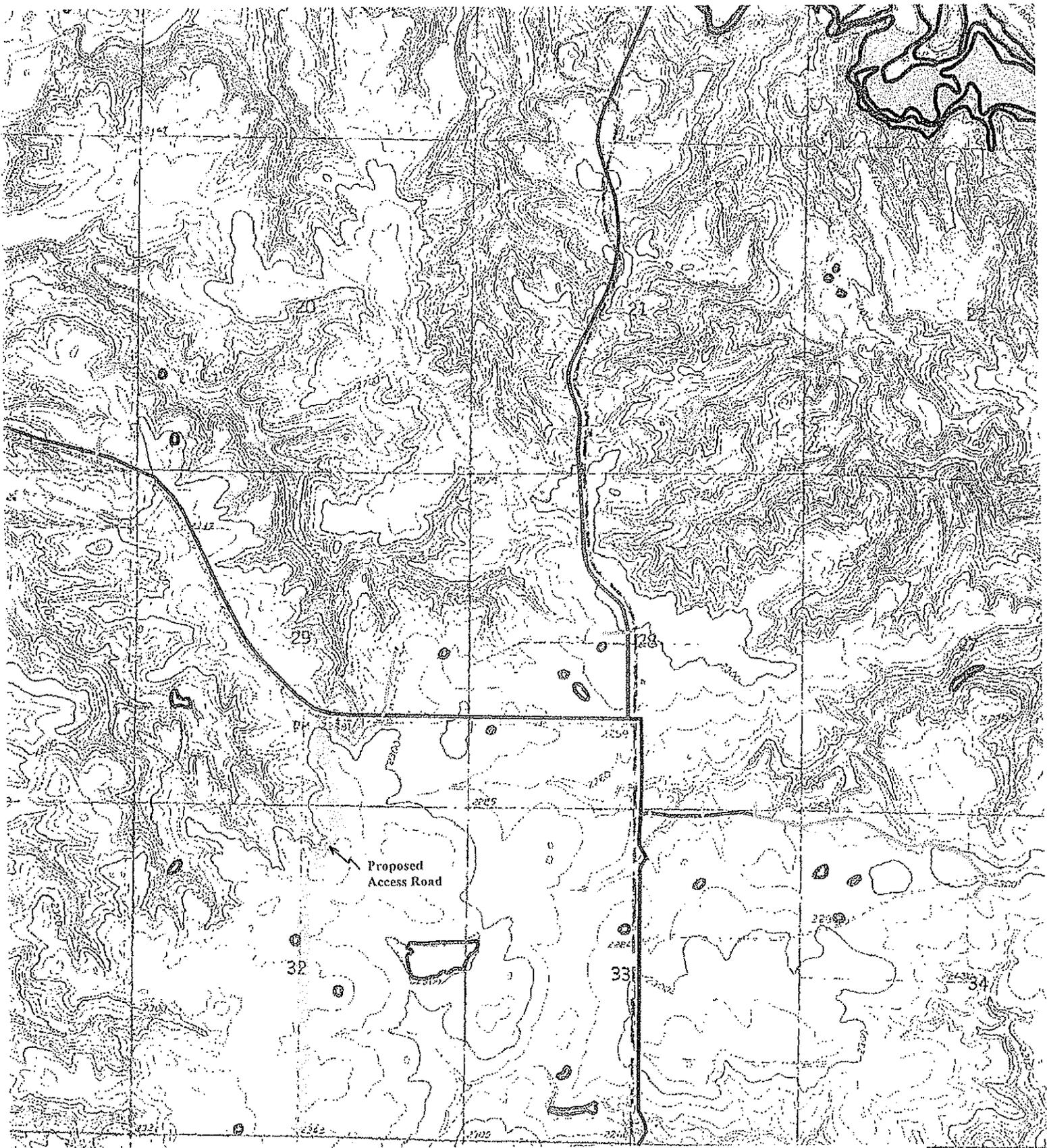
Sincerely,

Ronald D. Melhouse  
Environmental Specialist

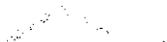
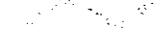
Enclosure

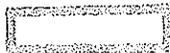
cc: Bureau of Indian Affairs  
Great Plains Regional Office  
Attention: Ms. Marilyn Bercier  
NEPA Coordinator  
115 Fourth Avenue S.E.  
Aberdeen, SD 57401  
(w/encl)

Mr. Marvin Danks  
Fort Berthold Rural Water Director  
Three Affiliated Tribes  
308 4 Bears Complex  
New Town, ND 58763



PIPELINE

	1" POLY		2 1/2"		6"		12"
	1 1/2"		3"		8"		14"
	2"		4"		10"		

 WETLANDS



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**

John Hoeven  
*Governor of North Dakota*

North Dakota  
State Historical Board

Chester E. Nelson, Jr.  
*Bismarck - President*

Gereld Gerntholz  
*Valley City - Vice President*

Richard Kloubec  
*Fargo - Secretary*

Albert I. Berger  
*Grand Forks*

Calvin Grinnell  
*New Town*

Diane K. Larson  
*Bismarck*

A. Ruric Todd III  
*Jamestown*

Sara Otte Coleman  
*Director  
Tourism Division*

Kelly Schmidt  
*State Treasurer*

Alvin A. Jaeger  
*Secretary of State*

Douglass Prchal  
*Director  
Parks and Recreation  
Department*

Francis Ziegler  
*Director  
Department of Transportation*

Merlan E. Paaverud, Jr.  
*Director*

*Accredited by the  
American Association  
of Museums*

October 2, 2009

Mr. Chad Baker  
SWCA Environmental Consultants  
295 Interlocken Boulevard, Suite 300  
Broomfield CO 80021

**NDSHPO REF. 10-0010 BIA/MHAN Environmental Assessment for road improvement 1.3 miles in a portion of [T150N R94W Sections 29, 32] McKenzie County, North Dakota**

Dear Mr. Baker,

We received your letter regarding NDSHPO REF. 10-0010 BIA/MHAN Environmental Assessment for road improvement 1.3 miles in a portion of [T150N R94W Sections 29, 32] McKenzie County, North Dakota. We request that a copy of cultural resource site forms and reports be sent to this office so that the cultural resources archives can be kept current. Perhaps one might consider putting TCP (Traditional Cultural Properties) related information in separate reports not sent to this office.

Thank you for your consideration.  
Consultation is with MHAN THPO.

If you have any questions please contact Susan Quinnell, Review & Compliance Coordinator at (701)328-3576 or [squinnell@nd.gov](mailto:squinnell@nd.gov)

Sincerely,

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer (North Dakota)  
and Director, State Historical Society of North Dakota

c: Mr. Perry Brady, MHAN THPO  
c: Dr. Carson Murdy, Archaeologist, BIA Aberdeen



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
CORPS OF ENGINEERS, OMAHA DISTRICT  
1616 CAPITOL AVENUE  
OMAHA NE 68102-4901

October 16, 2009

Planning, Programs, and Project Management Branch

Mr. Chad Baker  
Project Manager  
SWCA Environmental Consultants  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021

Dear Ms. Zahn:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated October 8, 2009 regarding the Environmental Assessment (EA) for the construction of a road on the Fort Berthold Indian Reservation in McKenzie County, North Dakota being prepared by the Bureau of Indian Affairs (BIA). The Corps offers the following comments:

Your plans should be coordinated with the U.S. Environmental Protection Agency, which is currently involved in a program to protect groundwater resources. If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the North Dakota Game and Fish Department regarding fish and wildlife resources. In addition, the North Dakota State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

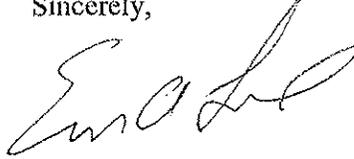
It should be ensured that the proposed project is in compliance with floodplain management criteria of McKenzie County and the State of North Dakota. As a minimum, the design should ensure that the 100-year flood water surface elevation of any stream affected that has a designated floodway, is not increased relative to pre-project conditions. If a designated floodway has not been identified then the design should ensure that the 100-year floodwater surface elevation is not increased by more than one-foot relative to pre-project conditions. It is desirable, however, that water surface elevations either remain the same or decrease as a result of this project.

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. You can visit the Omaha District's Regulatory website for permit applications and related information. Please review the information on the provided web site (<https://www.nwo.usace.army.mil/html/od-r/district.htm>) to determine if this project requires a 404 permit. For a detailed review of permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers  
Bismarck Regulatory Office  
Attention: CENWO-OD-R-ND/Cimarosti  
1513 South 12th Street  
Bismarck, North Dakota 58504

If you have any questions, please contact Ms. Theresa Martin of my staff at (402) 995-2704.

Sincerely,



 Brad Thompson  
Chief, Environmental Resources and Missouri Recovery  
Program and Plan Formulation, Planning Branch  
Planning, Programs and Project Management Division



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
3425 Miriam Avenue  
Bismarck, North Dakota 58501



NOV - 2 2009

Mr. Chad Baker  
SWCA Environmental Consultants  
295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021

Dear Mr. Baker:

The U.S. Fish and Wildlife Service (Service) has reviewed your recent letter, concerning the plans to construct a 1.3 mile access road on the Fort Berthold Indian Reservation. This project is located in Section 29 and 32, T. 150 N., R. 94 W., McKenzie County, North Dakota. Work on this project consists of upgrading an existing two track trail to provide access to a proposed oil well site in the NW¼NW¼ of Section 5, T. 149 N., R. 94 W. The two-track trail will be upgraded to an all-season road with storm water improvements. The road will be crowned and ditched with a 24 foot running surface and topped with 4 inches of scoria or gravel. Culverts will be installed in the road to maintain the existing drainage patterns. We offer the following comments to assist with the project planning process in accordance with the provisions of the National Environmental Policy Act (Pub. L. 91-190; 42 U.S.C. 4321-4347, January 1, 1970, as amended), the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), the Endangered Species Act (16 U.S.C. 1531 et seq.), and Executive Order 11990 concerning the protection of wetlands.

The proposed access route to the oil well site primarily crosses land that was previously disturbed for crop and hay production. The location of the road minimizes habitat fragmentation and impacts to native grasslands. Therefore, we believe the identified work can be completed without long-term impacts to fish and wildlife resources provided standard precautions are taken during construction. The Service recommends:

1. Developing and implementing a project erosion control plan for areas that will be disturbed during construction.
2. Promptly seeding all upland areas disturbed during construction with a native grass mixture suited for the soils in the project area. On steep slopes, coconut matting or other effective erosion control material should be installed to help ensure the initial seeding is successful.

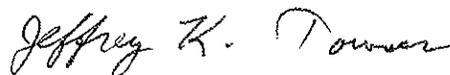
The Service has no property interest or planned developments adjacent to the proposed project.

A list of federally endangered, threatened, and candidate species that have been documented in McKenzie County is attached. This list fulfills the requirements of the Fish and Wildlife Service under Section 7 of the Endangered Species Act.

If a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its delegated agent, is required to evaluate whether the proposed action "may affect" listed species. If it is determined that the action "may affect, likely to adversely affect" a listed species, then the responsible agency will need to consult with this office. If the evaluation indicates that there will be "no affect" to listed species, further consultation is not necessary. At this time, the Service is not aware of any listed species in the project area.

The Service has no objection to the proposed project provided the recommendations in this letter are included as part of the project's construction plans. We appreciate the opportunity to review the plans to construct a road to provide access to an oil well site in McKenzie County. If additional information is needed, please contact me or Bill Bicknell of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,



Jeffrey K. Towner  
Field Supervisor  
North Dakota Field Office

Enclosure

cc: NEPA Coordinator, BIA, Aberdeen  
(Attn: Marilyn Bercier)  
District Manager, Bureau of Land Management, Dickinson  
Director, ND Game and Fish Dept., Bismarck  
(Attn: Mike McKenna)

FEDERAL THREATENED, ENDANGERED, AND CANDIDATE SPECIES  
AND DESIGNATED CRITICAL HABITAT FOUND IN  
MCKENZIE COUNTY, NORTH DAKOTA  
October 2009

**ENDANGERED SPECIES**

Birds

Interior least tern (Sterna antillarum): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.

Whooping crane (Grus Americana): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

Fish

Pallid sturgeon (Scaphirhynchus albus): Known only from the Missouri and Yellowstone Rivers. No reproduction has been documented in 15 years.

Mammals

Black-footed ferret (Mustela nigripes): Exclusively associated with prairie dog towns. No records of occurrence in recent years, although there is potential for reintroduction in the future.

Gray wolf (Canis lupus): Occasional visitor in North Dakota. Most frequently observed in the Turtle Mountains area.

**THREATENED SPECIES**

Birds

Piping plover (Charadrius melodus): Nests on midstream sandbars of the Missouri and Yellowstone Rivers and along shorelines of saline wetlands. More nest in North Dakota than any other state.

## **CANDIDATE SPECIES**

### Invertebrates

Dakota skipper (Hesperia dacotae): Found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower.

## **DESIGNATED CRITICAL HABITAT**

### Birds

Piping Plover - Lake Sakakawea - Critical habitat includes sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies.

# **Notice of Availability and Appeal Rights**

EOG Resources, Inc. : Proposed Access Road Upgrade  
Township 150 North, Range 94 West, Sections 29 and 32

**The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to the Proposed Access Road Upgrade in Township 150 North, Range 94 West, Sections 29 and 32. Construction by EOG Resources is expected to begin in 2009.**

**An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).**

**The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA’s decision to proceed with administrative actions *can* be appealed until December 23, 2009, by contacting:**

**United States Department of the Interior  
Office of Hearings and Appeals  
Interior Board of Indian Appeals  
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

**Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.**

Project location

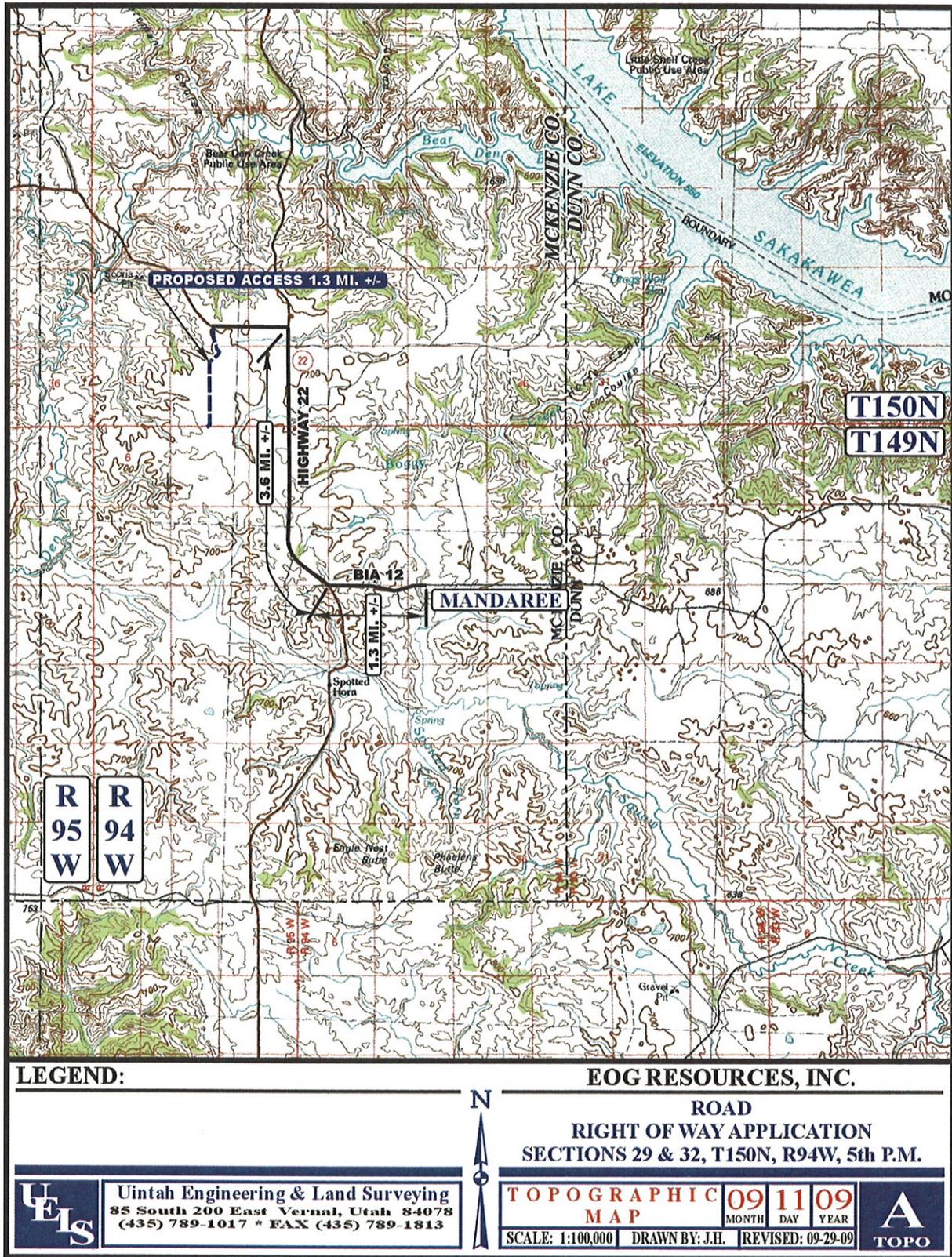


Figure 1. Project Location Map.